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IN THE  
**Supreme Court of the United States**

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October Term, 1971  
No. 71-1637

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THE CITY OF BURBANK, etc., *et al.*,

*Appellants,*

vs.

LOCKHEED AIR TERMINAL, INC., *et al.*,

*Appellees.*

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On Appeal From the United States Court of Appeals  
for the Ninth Circuit

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**MOTION FOR LEAVE TO FILE BRIEF  
AMICUS CURIAE**

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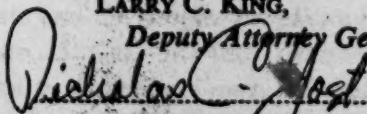
The State of California respectfully asks leave of  
the Court to file Amicus Curiae in this cause on be-  
half of appellants, *City of Burbank, et al.*

Respectfully submitted,

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On Appeal From the United States Court of Appeals  
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Brief of the State of California Amicus Curiae in  
Support of the Jurisdictional Statements of Ap-  
pellants

## INTEREST OF THE AMICUS

The Attorney General of California, as chief law officer, has broad powers derived from the common law, and absent any legislative restriction, has the power to file any civil action which he deems necessary for the protection of public rights and interests. *Pierce v. Superior Court*, 1 Cal. 2d 759, 761-62; see California Constitution, Art. V, § 13; Govt. Code §§ 12511, 12600 *et seq.* He may file environmental actions on behalf of the state and the people. *People ex rel. Younger v. El Dorado*, 5 Cal. 3d 480; *California-Oregon Power Company v. Superior Court*, 45 Cal. 2d 858, 871; *People v. Truckee Lumber Company*, 116 Cal. 397, 402.

California's interest in this case is of two kinds: (1) First, there is a state policy against noise pollution,<sup>1</sup> which policy is furthered by ordinances such as that adopted by Burbank to combat such pollution; (2) Second, California has the nation's most comprehensive regulatory plan for combating airport and aircraft noise pollution<sup>2</sup> which we would not like to see upset

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<sup>1</sup>Govt. Code § 16000 (b), (c), (d); *also see* Govt. Code §§ 12600, 12605, Public Resources Code § 21001(b).

<sup>2</sup>Title 4, Calif. Admin. Code §§ 5000-5080.3; *see* Public Utilities Code § 21669 *et seq.* For the convenience of the court we have attached the authorizing statutes as Appendix A and the Noise Regulations for California Airports as Appendix B.

With one exception (Title 4, Calif. Admin. Code §§ 5030-5032, 5035) the California regulations, unlike the Burbank, Cedarhurst, Hempstead, and Audubon Park ordinances (*see* para. IV(B) *infra*), do not directly regulate the aircraft and its noise. Instead, based upon the state's licensing of the proprietor, the regulations are, in their own words "designed to cause the airport proprietor, aircraft operator, local governments, pilots, and the department to work cooperatively to diminish noise." Title 4, Calif. Admin. Code § 5000. These regulations are noise standards for aircraft and aircraft engines for airports operating under a valid permit issued by the department. Sec. 21669; *see* § 21663, Title 4, Calif. Admin. Code § 5000. Elsewhere the purpose of the regulations is stated:

"5010. Purpose. The purpose of these regulations is to provide a positive basis to accomplish resolution of existing noise problems in communities surrounding airports and to prevent the development of new noise problems. To accomplish this purpose, these regulations establish a quantitative framework within which the various interested parties (i.e., airport proprietors, aircraft operators, legal communities, counties and the state) can work together effectively to reduce and prevent airport noise problems."

The regulations do not directly regulate aircraft noise. Instead they provide a framework within which the airport proprietor and other interested parties are to work together to achieve overall noise reduction in the surrounding residential areas. Limitations on airport noise in such residential communities are established. (Title 4, Calif. Admin. Code § 5012.) A noise impact boundary is established (Title 4, Calif. Admin. Code §§ 5006(h), 5013) as is a noise impact area which is the area within the noise im-

by a decision which on its face is directed at one municipal ordinance.

### SUMMARY OF ARGUMENT

Noise pollution, particularly that from aircraft noise, is one of the most pervasive environmental threats. A National Environmental Policy is established by recent legislation. Such legislation imposes upon

each boundary less than that area deemed to have compatible land use (Title 4, Calif. Admin. Code §§ 5006(i), 5014). The proprietor may not operate his airport with a noise impact area of other than zero unless he has a variance. (Title 4, Calif. Admin. Code § 5062; see § 5075.)

The various interested parties are given a wide variety of means within which to cooperate so as to reduce the noise impact area to zero. None is mandated. The pertinent section is quoted:

"5011. Methodology for Controlling and Reducing Noise Problems. The methods whereby the impact of airport noise shall be controlled and reduced include but are not limited to the following:

"(a) Encouraging use of the airport by aircraft classes with lower noise level characteristics and discouraging use by higher noise level aircraft classes;

"(b) Encouraging approach and departure flight paths and procedures to minimize the noise in residential areas;

"(c) Planning runway utilization schedules to take into account adjacent residential areas, noise characteristics of aircraft and noise sensitive time periods;

"(d) Reduction of the flight frequency, particularly in the most noise sensitive time periods and by the noisier aircraft;

"(e) Employing shielding for advantage, using natural terrain, buildings, et cetera; and

"(f) Development of a compatible land use within the noise impact boundary.

"Preference shall be given to actions which reduce the impact of airport noise on existing communities. Land use conversion involving existing residential communities shall normally be considered the least desirable action for achieving compliance with these regulations."

In brief, the California legislation and regulations do not directly control aircraft noise. Instead, they provide a framework within which the airport proprietor may cooperate with other interested parties to reduce the impact of aircraft noise on people.

state and local governments the primary responsibility of implementing the national environmental policy which provides for enhancement of environmental quality. The City of Burbank implemented the national policy by adoption of an ordinance directed at aircraft-produced noise pollution. Since the local ordinance *implements* the legislatively mandated national policy rather than conflicts with it, the ordinance should be upheld.

## ARGUMENT

### I

#### NOISE POLLUTION

Noise pollution, and particularly aircraft noise is one of the most pervasive threats to our environment.<sup>2</sup> In the words of the California Department of Public Health:

"Noise is ubiquitous in the environment and has many adverse effects on man. It causes hearing loss, interrupts sleep, interferes with speech and generally degrades the quality of life." California Department of Public Health, *A Report to the 1971 Legislature on the Subject of Noise Pursuant to Assembly Concurrent Resolution 165*, 1970, 4 (1971).

The threats to health and welfare occasioned by noise are well established:

"Physicians have reported a causal relationship between exposure to excessive noise over a period of time and the incidence of heart disease and cardiovascular disfunction, migraine headaches, gastrointestinal disorders, and allergies, as well as endocrine and metabolic effects." Hildebrand, *Noise Pollution: An Introduction to the Problem and an Outline for Future Legal Research*, 70 Colum. L. Rev. 652, 658 (1970).

Various forms of psychological distress, including irritation and tension-associated ailments, have also been attributed to noise, and particularly to noise which in-

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<sup>2</sup>We note that this court has recently had occasion to render decisions involving air and water pollution. *Washington v. General Motors Corp.*, ..... U.S. ...., 31 L.Ed. 2d 727, ..... S. Ct. .... (1972); *Illinois v. Milwaukee*, ..... U.S. ...., 31 L.Ed. 712 ..... S. Ct. .... (1972). See Noise Pollution and Abatement Act of 1970, 42 U.S.C. § 1858 *et seq.*

terrupts or disturbs sleep. See the Mayor's Task Force on Noise Control, *Toward a Quieter City*, 14 (N.Y. 1970). These undesirable consequences of excessive noise may then lead to others, such as economic loss:

"The World Health Organization estimates that lowered efficiency and increased errors caused by noisy working environments result in a loss of \$4 billion per year to American industry. In 1961 a *Time* estimate placed the cost of noise to American industry—for compensation, lost hours, and decreased efficiency—at \$2 million a day." Hildebrand, *supra*, at 653-654.

The worst cause of growing noise pollution is and will be the aircraft.

"[T]he greatest increase in the urban noise level has been brought about by the introduction of the turbojet engine into commercial airline operation." Hildebrand, *supra*, at 652.

To people who reside near airports, aircraft noise "constitutes the principal noise offense. . . ." Department of Public Health, *supra*, at 26. A typical long range, four-engine jet transport on takeoff spreads an unacceptable noise level countour 34,000 feet long and 6,000 feet wide. On landing the same aircraft causes unacceptable noise in a countour 11,000 feet by 1,500 feet. This is a total of approximately eight square miles of land outside the airport being exposed to unacceptable noise levels. *Id.*, at 26-27.

A recent study conducted under the auspices of the City of Los Angeles Department of Planning reinforces this conclusion with special reference to the Los Angeles area:

"[A]ircraft noise . . . will probably become the most pervasive and disturbing source [of urban

noise in the future. [Footnote omitted.] In areas immediately surrounding airports, low-flying aircraft and those taking off, taxiing, and testing engines on the ground generate the most intense and frequent noise in the city. [Footnote omitted.]” Branch and Beland, *Los Angeles City Department of Planning, Outdoor Noise and the Metropolitan Environment—Case Study of Los Angeles with Special Reference to Aircraft*, at 8, 1970.<sup>4</sup>

The degree of annoyance experienced from recurring noise varies according to the time of day. Specifically, such noise at night, when most people want to sleep, is worst. Wyle Laboratories Research Staff, *Supporting Information for the Adopted Noise Regulations for California Airports—Final Report to the Department of Aeronautics* (Report No. WCR 7-3(R), 1971), p. 8.

“Sleep disturbance caused by noise often occurs without the sleeping person’s knowledge. Noise

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\*The California Legislature has also found the problem of noise to be acute. Government Code section 16000 is quoted in part:

“16000. The Legislature finds that:

“(b) The proliferation of noise from transportation sources have led to the exposure of large sectors of the populace to an unacceptable degree of noise.

“(c) The anticipated rates of construction of new airports and extension of existing airports, construction of freeways and mass rapid transit lines, and the introduction into service of intraurban short takeoff and land and vertical takeoff and land aircraft operating at low cruising altitudes will rapidly escalate the urban noise problem unless systematic preventive measures are taken.

“(d) There is a large discrepancy between the technology available for control of urban noise and the degree to which it is being utilized in practice, through such means as land use planning, noise control provisions in building design and construction, and legal control over the movements of noise-producing transportation vehicles.”

which is not sufficient to arouse the subject may impair the quality of sleep by shifting him from a deeper stage of sleep to a shallower stage, or by depriving him of a sufficient amount of the portion of the sleep period which is connected with dreaming and which is thought to be most important for rest." *Id.*, at 23.

Briefly, noise is a problem, and noise at night is a great problem. The question then arises whether this Nation has acted to cope with such threats to its environment. It has.

## II

**THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 IMPOSES UPON STATE AND LOCAL GOVERNMENTS THE RESPONSIBILITY OF IMPLEMENTING THE NATIONAL POLICY WHICH PROVIDES FOR ENHANCEMENT OF ENVIRONMENTAL QUALITY**

### **A. The National Policy**

In 1970 the President signed the National Environmental Policy Act (N.E.P.A.) which has aptly been termed "the most important piece of environmental legislation ever written." California Continuing Education of the Bar, *Environmental Law Handbook*, §4.27, at 123 (1970). (The act appears at 42 U.S.C.A. §§ 4331-4347, Pub. L. 91-190.) N.E.P.A. establishes a national environmental policy. Section 101; 42 U.S.C. § 4331. The policy section is quoted:

"Sec. 101. (a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new

and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practical means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

“(b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may—

“(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

“(2) assure for all Americans, safe, healthful, productive, and esthetically and culturally pleasing surroundings;

“(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

“(4) preserve important historic, cultural, and natural aspects of our national heritage, and

maintain, wherever possible, an environment which supports diversity, and variety of individual choice;

"(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

"(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

"(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment." N.E.P.A. § 101, 42 U.S.C. § 4331.

Three months after enactment of N.E.P.A. Congress passed the Environmental Quality Improvement Act of 1970 to aid its implementation. (The act appears at 42 U.S.C.A. §§ 4371-4374, Pub. L. 91-224.) Here the Congress elaborated upon the national policy:

"Sec. 202. (a) The Congress finds—

"(1) that man has caused changes in the environment;

"(2) that many of these changes may affect the relationship between man and his environment; and

"(3) that population increases and urban concentration contribute directly to pollution and the degradation of our environment.

"(b)(1) The Congress declares that *there is a national policy for the environment which pro-*

*vides for the enhancement of environmental quality.* This policy is evidenced by statutes heretofore enacted relating to the prevention, abatement, and control of environmental pollution, water and land resources, transportation, and economic and regional development.

*"(2) The primary responsibility for implementing this policy rests with State and local governments . . ." (Emphasis added.)*

**1. Statutory Law Requires That Federal Laws Be Interpreted in Light of the National Environmental Policy**

In summary, the National Environmental Policy Act establishes a natural environmental policy. 42 U.S.C.A. § 4331; *see* 42 U.S.C.A. § 4371(b)(1). The "policies, regulations and public laws" of the nation "shall" be interpreted in accordance with the policies of that Act. 42 U.S.C.A. § 4332(1). The Court's responsibility is clear.

So is Burbank's responsibility. With regard to NEPA's policy, the statutes say: "The primary responsibility for implementing this policy rests with State and local governments." 42 U.S.C.A. § 4371(b)(2).

Hence, the Federal Aviation Act must now be interpreted in light of the policy established by the National Environmental Policy Act.

**1. Case Law Requires That Federal Laws Be Interpreted in Light of the National Environmental Policy**

**A. The United States Supreme Court**

In remanding another matter involving a transportation element, highways, this Court opened its opinion with the reference designed to put the issue in its proper perspective:

"The growing public concern about the quality of our natural environment has prompted Congress in recent years to enact legislation<sup>1</sup> designed to curb the accelerating destruction of our country's natural beauty." *Citizens to Preserve Overton Park, Inc., et al. v. Volpe, Secretary of Transportation*, 401 U.S. 402, 404, 28 L.Ed. 2d 136, 91 S.Ct. 814 (1971).

### B. *The Courts of Appeal*

The Courts of Appeal have been no less reticent in applying the national environmental policy. The Fifth Circuit in *Zabel v. Tabb*, 430 F.2d 199 (5th Cir. 1970), applied NEPA and the national environmental policy generally to a pre-existing statutory scheme relative to regulation of dredge and fill operations.

The court stressed that the policy was for all three branches of government to apply:

"The parallel of momentum as the three branches shape a national policy gets added impetus from the National Environmental Policy Act of 1969, Public Law 91-190, 42 U.S.C.A. §§ 4331-4347. This Act essentially states that every federal agency shall consider ecological factors when dealing with activities which may have an impact on man's environment. [Footnote omitted.]" (*Id.*, at 211; also see *Id.* at 200-201, 209, 212-213.)

<sup>1</sup>See, e.g., The National Environmental Policy Act of 1969, 83 Stat. 852, 42 U.S.C. § 4321 et seq. (1964 ed., Supp. V); Environmental Education Act, 84 Stat. 1312, 20 U.S.C.A. § 1531 et seq.; Air Quality Act of 1967, 81 Stat. 485, 42 U.S.C. § 1857 et seq. (1964 ed., Supp. V); Environmental Quality Improvement Act of 1970, 84 Stat. 114, 42 U.S.C.A. §§ 4371-4374." [Footnote the Court's.]

The first circuit to have been confronted with a case involving the National Environmental Policy Act as the central issue was that for the District of Columbia. In *Calvert Cliffs v. Atomic Energy Commission*, 449 F.2d 1109 (D.C. Cir. 1971), that court reviewed and remanded certain procedures of the A.E.C. in light of NEPA. (Also see *Conservation Society v. Texas*, 446 F.2d 1013 (5th Cir. 1971).)

Said the court in *Calvert Cliffs*:

"... The sweep of NEPA is extraordinarily broad, compelling consideration of any and all types of environmental impact of federal action."

*Id.* at 1122.

What the court had to say about the role of the judiciary is not out of place in this case where the Federal Aviation Administration, in suing to invalidate a city's implementation of the Congressionally-declared National Environmental Policy, blythely ignores that policy.

"These cases are only the beginning of what promises to become a flood of new litigation—litigation seeking judicial assistance in protecting our natural environment. Several recently enacted statutes attest to the commitment of the Government to control, at long last, the destructive engine of material 'progress.' [Footnote omitted.] But it remains to be seen whether the promise of this legislation will become a reality. Therein lies the judicial role. In these cases, we must for the first time interpret the broadest and perhaps most important of the recent statutes: the National Environmental Policy Act of 1969 (NEPA). [Footnote omitted.] We must assess claims that

one of the agencies charged with its administration has failed to live up to the congressional mandate. Our duty, in short, is to see that important legislative purposes, heralded in the halls of Congress, are not lost or misdirected in the vast hallways of the federal bureaucracy." *Id.* at 1111.

In remanding the matter, the Court of Appeal concluded:

"[W]e require only an exercise of substantive discretion which will protect the environment 'to the fullest extent possible.' No less is required if the grand congressional purposes underlying NEPA are to become a reality." *Id.* at 1129.

In brief, there is now a National Environmental Policy. By the command of both statute and case law, regulations and public laws are now to be interpreted in light of that policy. Specifically, the Federal Aviation Act, which some pre-N.E.P.A. cases appeared to hold as restricting the area left for local government action, must now be interpreted in light of the National Environmental Policy Act and the Environmental Quality Improvement Act which command the state and local governments to implement the National Environmental Policy. Former local noise pollution ordinances were held to conflict with Federal law. The Burbank noise pollution ordinance implements Federal law.

#### **B. Burbank Has Acted to Implement the National Policy**

On March 31, 1970, the City of Burbank passed a noise ordinance imposing a jet curfew.

So what do we have?

1. Noise pollution is a problem.

2. Aircraft noise pollution is a problem.
3. Nighttime noise pollution is a greater problem.
4. Congress has declared a national policy against environmental pollutants.
5. Congress has declared that State and local governments bear the primary responsibility for implementing that national policy.
6. The City of Burbank implemented that policy by barring aircraft-produced jet noise pollution at night.

### III

#### CONGRESS HAS NOT PREEMPTED THE FIELD OF AIRCRAFT-PRODUCED NOISE POLLUTION

When the Federal government wants to preempt something, it says so. The very subject now before this court, aircraft-caused pollution, illustrates the point dramatically. In the field of aircraft-produced air pollution there is a clear Congressional directive to preempt. By way of contrast, in the field of aircraft-produced noise pollution there is a clear Congressional attempt not to preempt.

Regarding aircraft-produced air pollution, Congress has said:

"No State or political subdivision thereof may adopt or attempt to enforce any standard respecting emissions of any air pollutant from any aircraft or engine thereof unless such standard is identical to a standard applicable to such aircraft under this part." 42 U.S.C. §1857f-11.

By way of contrast, in the Federal Aviation Act (which includes the regulation of aircraft-produced noise pollution) Congress has said:

"Nothing contained in this chapter shall in any way abridge or alter the remedies now existing at

common law or by statute, but the provisions of this chapter are in addition to such remedies." 49 U.S.C. § 1506.

The difference in language makes manifest the difference in Congressional intent.

#### IV

### THE BURBANK ORDINANCE DOES NOT CONFLICT WITH ANY FEDERAL LAW OR REGULATION

#### A. The Court of Appeals' Holding

Perhaps the most appalling aspect of the Court of Appeals' holding is the suggestion that one rather minor federal bureaucraft can invalidate the duly adopted legislation of a state or the ordinances of a local government. One of the court's two apparent holdings ("The Conflict Issue") is that the City's ordinance is invalid because the tower chief says so. *Lockheed Air Terminal, Inc. v. City of Burbank*, 457 F.2d 667, 675-676 (9th Cir. 1972).

The F.A.A. Chief of the Airport Traffic Control Tower issued a series of runway preference orders. *Id.*, at 669. One of these provided that a particular runway be used as much as possible for turbine take-offs at night. *Ibid.* The tower chief said in his order that this procedure will lower noise "to the lowest practicable minimum. . . ." *Id.*, at 676. [As accurately found by the District Court, this procedure does not end noise but "merely diverts the noise to other populated areas." Finding 56.] The Ninth Circuit then went on to elevate this functionary's noise diversion to such constitutional significance as to invalidate the City's ordinance.

"This assertion represents a considered determination by an authorized representative of the FAA

that measures of the magnitude of that taken by the City of Burbank are beneath the 'lowest practicable minimum.' The municipal curfew ordinance, therefore, interferes with the balance set by the FAA among the interests with which it is empowered to deal and frustrates the full accomplishment of the goals of Congress. [Footnote omitted.] Because of this conflict . . . the Burbank ordinance is unconstitutional, illegal and void." *Lockheed v. Burbank*, *supra*, at 676.

Rarely in the course of legal endeavor has so little been magnified into so much. The local order of a tower chief is ballooned into a "considered determination" of a federal agency of such Constitutional significance as to render a City ordinance "unconstitutional, illegal and void."

Surely this Court had something more substantial in mind when it said that intent to supersede state regulation "is not to be implied unless the act of Congress fairly interpreted is in actual conflict with the law of the State." *Huron Cement Co. v. Detroit*, *supra*, 362 U.S. 440, 443, 80 S. Ct. 813, 4 L.Ed. 852 (1960). Here we are not talking about an act of Congress. We are not talking about a regulation adopted at a national agency level.<sup>6</sup> We are not even talking about a regula-

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<sup>6</sup>We note that Title 14, Code of Federal Regulations, Part 93, deals with "Special Air Traffic Rules and Airport Traffic Patterns." There are regulations governing John F. Kennedy International Airport, Floyd Bennett Naval Air Station, the Anchorage, Alaska, Terminal Area, the Phoenix-Litchfield area, the Valparaiso, Florida, Terminal Area; the Portland International Airport Terminal Area, and the following control zones: Atlanta, Ga. (Atlanta Airport); Baltimore, Md. (Friendship International Airport); Boston, Mass. (Logan International Airport); Buffalo, N.Y. (Great Buffalo International Airport); Chicago, Ill. (O'Hare

(This footnote is continued on next page)

tion of regional applicability. We are talking about one tower chief's noise shift rule for two runways.

Besides, the order and the ordinance are not in conflict. Having a preferential runway is in no way in conflict with barring, with exceptions, jet takeoffs. The two rulings (order and ordinance) may be quite compatibly applied so that night jet takeoffs are not permitted except for the exceptions. The exceptions shall take off on the preferential runways.

Surely that is a construction both more harmonious and more in tune with this court's rulings than the elevation of a minor functionary's local order to constitutional ordinance-invalidating, significance.

### **B. Pre-NEPA Case Law**

The issue presented by this appeal is whether a city may enact a noise pollution ordinance (barring night

International Airport); Cleveland, Ohio (Cleveland-Hopkins International Airport); Columbus, Ohio (Columbus Municipal Airport); Covington, Ky. (Greater Cincinnati Airport); Dallas Texas (Love Field); Denver, Colo. (Stapleton Municipal Airport); Detroit, Mich. (Metropolitan Wayne County Airport); Honolulu, Hawaii (Honolulu International Airport); Houston, Tex. (Intercontinental Airport); Indianapolis, Ind. (Wier-Cook Municipal Airport); Kansas City, Mo. (Kansas City Municipal Airport); Los Angeles, Calif. (Los Angeles International Airport); Louisville, Ky. (Standiford Field); Memphis, Tenn. (Memphis Metropolitan Airport); Miami, Fla. (Miami International Airport); Minneapolis, Minn. (Minneapolis-St. Paul International Airport); Newark, N.J. (Newark Airport); New York, N.Y. (John F. Kennedy International Airport); New York, N.Y. (La Guardia Airport); New Orleans, La. (New Orleans International Airport-Moisant Field); Oakland, Calif. (Metropolitan Oakland International Airport); Philadelphia, Pa. (Philadelphia International Airport); Pittsburgh, Pa. (Greater Pittsburgh Airport); Portland, Oreg. (Portland International Airport); San Francisco, Calif. (San Francisco International Airport); Seattle, Wash. (Seattle-Tacoma International Airport); St. Louis, Mo. (Lambert-St. Louis Municipal Airport); Tampa, Fla. (Tampa International Airport); Washington, D.C. (Washington National Airport). There is no mention of Hollywood-Burbank.

takeoffs of jets) which does not conflict with any federal law or regulation. We would agree that under existing (pre-N.E.P.A.) case law where there is in fact such a direct conflict, the local enactment is preempted. *Allegheny Airlines v. Cedarhurst*, 238 F.2d 812, 814-15 (2d Cir. 1956); *American Airlines Inc. v. Hempstead*, 398 F.2d 369, 372-375 (2d Cir. 1968), cert. den. 393 U.S. 1017 (1969); *American Airlines, Inc. v. City of Audubon Park, Kentucky*, 407 F.2d 1306, 1307 (6th Cir. 1969).<sup>6</sup> But where as in this case there is no such conflict, the local enactment is valid. *Stagg v. Municipal Court*, 2 Cal. App. 3d 318 (1969).<sup>7</sup>

These are the four cases involving municipal limitation of aircraft-produced noise pollution. Let us examine the facts of each of them.

In the *Cedarhurst* case, the village enacted an ordinance prohibiting air flights above the city at less than 1,000 feet above the ground. *Allegheny Airlines v. Cedarhurst*, *supra*, at 814. Federal regulations required planes to pass over Cedarhurst at an elevation as low as 450 feet. *Id.* at 814-15. Hence, there was a direct conflict.

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<sup>6</sup>One additional case deals with a proposed over-broad state statute. *Opinion of the Justices*, 271 N.E. 2d 354 (S.J.C. Mass. 1971).

<sup>7</sup>This corresponds with the general rule as stated by the Supreme Court in the leading case involving local regulation of a pollutant:

"In determining whether state regulation has been preempted by federal action, 'the intent to supersede the exercise by the State of its police power as to matters not covered by the Federal legislation is not to be inferred from the mere fact that Congress has seen fit to circumscribe its regulation and to occupy a limited field. In other words, such intent is not to be implied unless the act of Congress fairly interpreted is in actual conflict with the law of the State.'" *Huron Cement Co. v. Detroit*, *supra*, 362 U.S. 440, 443, 80 S. Ct. 813, 4 L.Ed. 2d 852 (1960).

In *Hempstead* the town adopted maximum noise levels for overflights termed "limiting noise spectra." *American Airlines, Inc. v. Hempstead, supra*, at 370. Compliance with the noise ordinances would require alteration of flight procedures and patterns established by federal regulation. *Id.*, at 375. The ordinance was therefore in direct conflict with valid applicable federal regulation. *Id.*, at 372; *see Id.*, at 370-375.

The *Audubon Park* ordinance barred operation of an aircraft over the municipality of less than 750 feet. *American Airlines, Inc. v. City of Audubon Park, Kentucky, supra*, at 1307. This was in direct conflict with federal regulations which would put an aircraft below 750 feet. *Ibid.*

In the above three cases ordinances which in fact conflicted with federal regulations were invalidated.

We have been able to find only one case where there was no conflict. In that case a municipality adopted a noise pollution ordinance substantially identical to the one enacted by Burbank. *Stagg v. Municipal Court, supra*, 2 Cal. App. 3d 318. The City of Santa Monica barred jet takeoffs between 11:00 p.m. and 7:00 a.m. of the following day. *Id.*, at 319. The California Court of Appeal found no conflict with any federal enactment. *Id.* at 321. The validity of the ordinance was upheld.

Until the district court's decision in this case, every court which considered the validity of a municipal ordinance directed at aircraft-produced noise pollution (whether by height limitation, noise limitation, or time limitation) had held those which in fact were in direct conflict with federal enactments invalid, and that which was not in direct conflict valid.

These cases have shown sensitivity to the competing demands inherent in a federal system. Not only judicial restraint but an appreciation of the roles of the various bodies of government existing within the one nation would dictate an acknowledgment of local needs in responding to local complaints about aircraft noise absent a direct conflict with federal regulation.

In this case there is no conflict between any Federal law or regulation and the Burbank ordinance. This is evident even from the findings of the District Court.

The District Court found that the airlines are "authorized" by the appropriate Federal agency to use Hollywood-Burbank Airport. [Finding 27.] Nowhere are they "directed" to use that airport, at night or in general.

The court below found that the aircraft and pilots are properly certified and that the airport is going to apply for certification. [Findings 29-33.] Nowhere are pilots, planes, or airports required to take off jets at night.

Aircraft in the vicinity of Hollywood-Burbank are subject to various Federal regulations pertaining primarily to safety. [Findings 34-53.] Nowhere are jet aircraft required to take off from Burbank at night.

There are Federal flow control regulations at various eastern airports. [Findings 53-54.] These do not exist at Hollywood-Burbank. Indeed, they do not exist at any airport which is served by flights to or from Hollywood-Burbank. [See Exs. 42-46; Rep. Tr. pp. 95-96.]

Federal regulations provide for flying at minimum altitudes under stated circumstances. [Finding 55.] They do not require taking off from Burbank at night.

The FAA chief at the Airport Traffic Control Tower in Burbank has prescribed that when certain planes take off from Burbank at night they shall use a preferential runway. [Finding 56.] (This procedure does not end noise but "merely diverts the noise to other populated areas." [Finding 56.]) Nowhere does this order require that any jet take off from Burbank at night.

The FAA has developed standard instrument departures for use at some airports (apparently not including Burbank). [Finding 57.] These do not require an airplane to take off at night.

Some of the conclusions of law strain for conflicts which are not apparent from the findings. For instance, the District Court concluded that the ordinance was in conflict with federal law in that the former's enforcement would preclude air carriers' compliance with the latter's requirement of providing adequate service. [Conclusion 17.] This is specious:

(1) An examination of the certificates of public convenience and necessity makes clear that the C.A.B. in no way required flight at night from Burbank. [Exs. 8-11; Rep. Tr. p. 68; see Ex. 35.] They are phrased in terms of *authorization*, not of *direction*.

(2) Finally as the findings state, the Burbank ordinance invalidated *no* flight in *interstate* commerce under C.A.B. jurisdiction. The only flight affected was a PSA *intrastate* one under P.U.C. jurisdiction. [Finding 61; see Finding 65.] (Should sufficient demand develop, one airline may add one flight in interstate commerce which might violate the ordinance. [Finding 66.] )

The conclusions next state that the ordinance conflicts with the generalities of federal sovereignty over navigable airspace and with freedom of transit. [Finding 18.] Falling back on such generalities only serves to emphasize the lack of any federal regulation saying somebody must take off in a jet from Burbank at night with which the ordinance conflicts.

In brief, all the previous cases have drawn a wise and careful line between municipal ordinances which are in fact in direct conflict with federal law or regulation (which are invalid) and those which are not in fact in such conflict (which are valid). There is no Federal law or regulation which says that anybody has to take off in a jet airplane within the city limits of Burbank at night.

## V

### PREEMPTION GENERALLY.

We have previously prepared a California Attorney General's opinion on the subject of jurisdiction to regulate aircraft noise pollution. 53 Ops. Calif. Atty. Gen. 75. For the convenience of the Court we have attached a copy as Appendix C. It was prepared in less litigious circumstances and represents the opinion of this office.\*

We would reiterate the attention given to two cases in the discussion by the Appellants in their Jurisdictional Statement. *Colorado Anti-Discrimination Commission v. Continental Air Lines, Inc.*, 372 U.S. 714, 83 S. Ct. 1022, 10 L.Ed. 2d 84 (1963); *Huron Port-*

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\*Since preparation of the opinion the National Environmental Policy Act, 42 U.S.C. §§ 4331-4347, *supra*, has been enacted, and two cases (discussed elsewhere) have been decided (other than this one). *Stagg v. Municipal Court, supra*, 2 Cal. App. 3d 318; *Opinion of the Justices, supra*, 271 N.E. 2d 354.

*land Cement Co. v. Detroit, supra*, 362 U.S. 440, 80 S. Ct. 813, 4 L.Ed. 2d 852 (1960).

The state of the law regarding Federal preemption of airport regulation has been well summarized by a Federal District Court as follows:

"... Unquestionably broad as are the powers of the Administrator with respect to the regulation of air traffic, it is evident in this and in other contexts that the Administrator has not so pervasively regulated the movement of aircraft that he has excluded the existence of areas of proper airport regulation." *Aircraft Owners & Pilots Ass'n. v. Port Authority of New York*, 305 F. Supp. 93, 104 (E.D.N.Y. 1969).

## VI

### APPELLEES' STRAW MAN

Appellees spent much time and effort in the trial and in the preparation of findings in erecting and fighting a straw man that does not figure in this case. [Findings 67-82.] Though there may be no particular burden on interstate commerce occasioned by the Burbank ordinance, appellees raised the specter of a nationwide curfew which would be prejudicial to their interests.

#### A. The Facts Do Not Support Appellees' Assertion

A little attention to the facts of this case is helpful. No air mail is carried to or from the Hollywood-Burbank Airport. [Finding 21.] No all-cargo flights are presently operated from Hollywood-Burbank. [Finding 22.] No flight in interstate commerce is precluded from taking off from Hollywood-Burbank by the ordinance. [Finding 61.] The only regularly scheduled flight was

an intrastate one by an airline (PSA) whose operations are solely intrastate and whose certificate of public convenience and necessity is issued by the California Public Utilities Commission. [Findings 61, 26.] (PSA also operated an intrastate charter which was allowed to continue to operate under the emergency exception to the ordinance. [Finding 62.]) One interstate airline contended that if sufficient demand developed it anticipated adding a flight which would normally conflict with the Burbank ordinance. [Finding 66.]

Appellees raised the specter of nationwide disorganization caused through six time zones by Burbank's action. [Rep. Tr. p. 13.] Again, a little fresh water on the heat of argument is helpful. From our examination of the schedules in evidence in this case, we conclude that jet flights from Hollywood-Burbank go into only one other time zone, and there are only four of these on a typical day (none during the curfew). [Exs. 42-46; Rep. Tr. p. 502.] With all due regard for the airport which is the subject of this litigation, it is not the hub of American interstate commerce. It is, in the phrase of appellee's witness, a "neighborhood airport." [Rep. Tr. p. 224.] The neighbors of the airport, in the City of Burbank, would prefer their neighbor to be a bit quieter at night.\*

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\*One may question the neighborliness of the airlines who use the airport. Appellee's own witness from Continental Airlines testified in a manner that might lead one to conclude that the airlines generated the use rather than responded to a need:

"Our main problem is to attempt to change the travel habits of the people who are now moving between the Burbank area and Portland and Seattle. We have embarked upon a massive marketing program which includes advertising through all media, television, radio, and newspapers, and sales promotional material being mailed to the various large companies involved.

(This footnote is continued on next page)

In brief, the facts of this case show no national impact. Indeed, the facts showed no impact at all upon interstate commerce caused by Burbank's ordinance.

### **B. The Rights of Airport Proprietors Negate Appellees' Straw Man**

Quite briefly, without regard to the existence or non-existence of Federal preemption an airport proprietor may impose a curfew. Since it may do so, the potential of a nationwide rash of curfews exists quite independently of the outcome of this case which turns upon the authority of a city.

There exists this one generally recognized exception to federal preemption—the power of the airport proprietor without violation of either the commerce or the supremacy clause to decide who is to use his airport and under what conditions. *See Griggs v. Allegheny County*, 369 U.S. 84, 82 S. Ct. 531, 7 L.Ed. 2d 585 (1962) (holding county as airport proprietor liable for damages caused by overflights); 53 Ops. Cal. Atty. Gen., *supra*, 75, 80.

The legislative history of the 1968 noise amendments to the Federal Aviation Act and the FAA have recognized the existence of this exception to federal powers. In the words of the Senate report:

“However, the proposed legislation will not affect the rights of a State or local public agency, as the proprietor of an airport, from issuing regulations or establishing requirements as to the permissible level of noise which can be created by air-

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“We have engaged in direct sales campaigns with a number of the general traffic managers in the area in an effort to advise them of our service, convenience of the availability of the service between Burbank and Portland and Seattle.” [Rep. Tr. pp. 222-223.]

craft using the airport. Airport owners acting as proprietors can presently deny the use of their airports to aircraft on the basis of noise considerations so long as such exclusion is nondiscriminatory. . . . In dealing with this issue, the Federal Government should not substitute its judgment for that of the States or elements of local government who, for the most part, own and operate our Nation's airports. The proposed legislation is not designed to do this and will not prevent airport proprietors from excluding any aircraft on the basis of noise considerations." Senate Report No. 1353, July 1, 1968, U.S. Code Cong. and Admin. News (1968) 2688, 2694.

The FAA has consistently acknowledged the powers and responsibilities of airport proprietors in the field of noise. The FAA's Notice of Proposed Rule Making issued with the first proposed rules under the 1968 noise amendment states the following:

"[T]his notice does not promise a federal substitute for the actions that airport operators, as proprietors, can take and have traditionally and responsibly taken to make their airports fit the particular needs of their locales, such as establishing the conditions under which their airports and airport facilities may be used, including the issuance of specific noise ceilings." (34 Fed. Reg. 457, Jan. 11, 1969.)

In adopting the aircraft type certification noise standards the FAA notice stated:

*"Relation to responsibility of airport proprietors.* Compliance with Part 36 is not to be construed as a Federal determination that the aircraft

is 'acceptable,' from a noise standpoint, in particular airport environments. Responsibility for determining the permissible noise levels for aircraft using an airport remains with the proprietor of that airport. The noise limits specified in Part 36 are the technologically practicable and economically reasonable limits of aircraft noise reduction technology at the time of type certification and are not intended to substitute federally determined noise levels for those more restrictive limits determined to be necessary by individual airport proprietors in response to the locally determined desire for quiet and the locally determined need for the benefits of air commerce. This limitation on the scope of Part 36 is required for consistency with the responsibilities placed upon the airport proprietor by the U.S. Supreme Court in *Griggs v. Allegheny County*, 369 U.S. 84 (1962)." 34 Federal Register 18355, November 18, 1969.

Most commercial airports in the United States, including most of those in California, are publicly owned. (*Id.* at 18356.) One major airport proprietor has adopted noise regulations in terms of perceived noise levels, the Port of New York Authority (which has proprietary authority over Kennedy, La Guardia, Newark and Teterboro Airports). Airport Rules and Regulations Rules 32010-06; Port of New York Authority, Terms and Conditions for the Operation of Jet Aircraft. Its regulations restricting runway use (despite FAA permission to use those runways) have been upheld against an airline's attack. *Port of New York Authority v. Eastern Airlines, Inc.*, 259 F. Supp. 745 (E.D. N.Y. 1966). Further regulations of the Port Authority imposing a landing fee to discourage general aviation

aircraft from landing during particular hours have also been upheld. *Aircraft Owners and Pilots Association v. Port of New York Authority*, *supra*, 305 F. Supp. 93 (E.D.N.Y. 1969).

There is therefore no bar to governmental entities which own or lease airports imposing noise restrictions in their proprietary rather than legislative capacity.<sup>10</sup> Regarding FAA approved methods, see Hoover and Cochran, FAA, *Airport Design and Operation for Minimum Noise Exposure* (1969), 12-13; Sperry, Powers, and Oleson, FAA, *The Federal Aviation Administration Aircraft Noise Abatement Program* (1968), 21-23; 53 Ops. Cal. Atty. Gen., *supra*, 75, 82.

This being the case, appellee's straw man must slump. Whether a city may or may not impose a curfew simply does not make that much difference. Since proprietors can impose a curfew anyway, the cities' authority is not that determinative.

### C. Appellees Have Chosen the Wrong Remedy

Even if we were to concede the contagion of curfews and the horrors attendant thereupon which appellees assert, they have failed to pursue their appropriate administrative remedy.

We can only reiterate the suggestion we made at the trial court. [Rep. Tr. p. 905, *et seq.*]. If Appellees' fear is a legitimate one, they should go to the FAA and determine if it can act under its rule-making powers. Perhaps there is a need for planes to take off from

<sup>10</sup>Indeed, an airport of which the Federal government is the proprietor, Washington National, appears to have a night curfew on jet operations. NASA Langley Research Center and Old Dominion University, *Transportation Noise Pollution: Control and Abatement*, p. 185 (NASA Contract NGT 47-003-028, 1970).

major cities at night. But there could hardly be a need to take off in jets from every neighborhood airport disturbing the sleep of all airport neighbors. Perhaps the FAA or the Congress would find it appropriate to require that one airport in each major city be kept open at night for such air commerce as must take place in the dark.

But surely, neither Congress nor the FAA having done this, it is a bit much to require that every neighborhood airport be subjected to nighttime noise pollution. Surely all neighborhoods are not without recourse to their local governments, particularly when those governments are acting to implement a Congressionally-declared national environmental policy.

### Conclusion

1. Noise pollution is a problem. (Para. I, *supra*.)
2. Aircraft noise pollution, particularly at night, is a problem. (Para. I, *supra*.)
3. Congress has declared a National Environmental Policy against pollution. (Para. II(A), *supra*; 42 U.S.C.A. §§ 4331, 4371 (B)(1).)
4. The regulations and public laws of the nation "shall" be "interpreted" in accordance with the National Environmental Policy. (Para. II(A)(1), *supra*; 42 U.S.C. § 4332(1).)
5. "The primary responsibility for implementing this policy rests with State and local governments." (Para. II(A)(1), *supra*; 42 U.S.C.A. § 4371(b)(2).)
6. The local government in question, the City of Burbank, has implemented that policy. (Para. II (B).)

In brief, while the pre-N.E.P.A. cases of *Cedarhurst*, *Hempstead*, and *Audubon Park* dealt with local enactments in *conflict* with federal law, this case involves a local enactment in *implementation* of federal law. The ordinance is not preempted.

Respectfully submitted,

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## **APPENDIX A.**

### **§ 21669. *Adoption of noise standards***

The department shall adopt noise standards governing the operation of aircraft and aircraft engines for airports operating under a valid permit issued by the department to an extent not prohibited by federal law. The standards shall be based upon the level of noise acceptable to a reasonable person residing in the vicinity of the airport.

### **§ 21669.1 *Establishment of noise standards advisory committee; composition***

There is hereby established an advisory committee to assist the department in the adoption of noise standards. The committee shall be composed of seven members appointed by the Governor as follows:

(a) Two members, one of whom shall be representative of homeowners concerned with aircraft noise.

(b) One member each from the Department of Public Health, the League of California Cities, the County Supervisors Association, the Department of Education, and the Air Transport Association.

The existence of the committee shall terminate on January 1, 1971.

### **§ 21669.2 *Guidelines***

In its deliberations the department and the advisory committee shall be governed by the following guidelines:

(a) Statewide uniformity in standards of acceptable airport noise need not be required, and the maximum amount of local control and enforcement shall be permitted.

(b) Due consideration shall be given to the economic and technological feasibility of complying with the standards promulgated by the department.

**§ 21669.3 *Report to legislature; effective date of regulations; designation of airports having noise problem; establishment of monitoring system***

(a) The department shall submit a comprehensive report of the noise regulations adopted pursuant to Sections 21669, 21669.1 and 21669.2 to the Legislature on or prior to December 31, 1970, and the regulations shall go into effect on December 1, 1972, except as provided in subdivisions (b), (c), and (d).

(b) Any regulations designed to establish a noise monitoring program at an airport shall go into effect on the effective date of the amendments to this section enacted at the 1971 Regular Session of the Legislature. Any regulations applicable to airports entering service after November 30, 1971, shall go into effect on that date.

(c) Every county board of supervisors shall, as of the effective date of the amendments to this section enacted at the 1971 Regular Session of the Legislature, designate airports within their respective counties having a noise problem for purposes of this subdivision. Each airport so designated shall, on or before December 1, 1971, have a noise monitoring system meeting the requirements of the department's noise regulations in operation. The department may grant an extension of time for compliance with this subdivision where an airport operator shows to the satisfaction of the department that noise monitoring equipment is not available. This subdivision shall be effective only until December 1, 1972, and after that date shall have no force or effect.

(d) At every airport in operation on the effective date of the amendments to this section enacted at the 1971 Regular Session of the Legislature which has a volume of passenger traffic exceeding one million persons arriving and departing per year, and which is determined under subdivision (c) to have a noise problem, there shall not be any increase in the noise level beyond that which existed at such airport at the date of the determination. In the event any action taken under any noise regulation of the department, or in the event the implementation of any technological improvements, succeeds in lowering the level of noise at the airport, such reduced level of noise shall constitute the permissible limits of noise. This subdivision and the noise limits specified in this subdivision, to the extent permissible under federal law, shall be effective only until December 1, 1972, and after that date shall have no force or effect.

**§ 21669.4 Violation of standards; enforcement; penalties**

(a) The violation of the noise standards by any aircraft shall be deemed a misdemeanor and the operator thereof shall be punished by a fine of one thousand dollars (\$1,000) for each infraction.

(b) It shall be the function of the county wherein an airport is situated to enforce the noise regulations established by the department. To this end, the operator of an airport shall furnish to the enforcement authority designated by the county the information required by the department's regulations to permit the efficient enforcement thereof. The operator of each airport shall reimburse the county for its costs of implementing the airport noise regulations contained in

Article 8 (commencing with Section 5050) of subchapter 6 of Title 4 of the California Administrative Code, which shall, for purposes of subdivision (c), credit the operator for any amounts received from penalties assessed for violations at such airport. Upon request of the operator, the department shall review and shall determine the reasonableness of such costs, and such costs may be considered in fixing any airport user fees.

(c) Penalties assessed for the violation of the noise regulations shall be used first to reimburse the General Fund for the amount of any money appropriated to carry out the purposes for which the noise regulations are established, and second be used in the enforcement of the noise regulations at participating airports.

§ 21669.5 *Construction of regulations; duty of care; presumptions; evidence*

(a) The noise regulations adopted pursuant to Sections 21669, 21669.1, and 21669.2 shall not be construed to establish a duty of care in favor of any person or entity and shall not create for use by any person or entity a presumption to establish in any eminent domain proceeding a taking or damaging of property or a presumption to establish injury, damage, or a taking in any action or proceeding to recover for injury, damaging, or taking by reason of the operation of aircraft or aircraft engines. Such regulations shall be inadmissible as evidence, and shall not be a proper basis for an opinion or a proper basis for cross-examining or impeaching a witness, or a matter of which judicial notice may be taken, in any eminent domain action or

in any action or proceeding to recover for injury, damaging, or taking by reason of the operation of aircraft or aircraft engines.

(b) Subdivision (a) shall not apply in any action or proceeding brought under this part to enforce the noise regulations or to punish violations thereof.

(c) This section shall remain in effect until the 61st day after final adjournment of the 1974 Regular Session of the Legislature, and shall have no force or effect after that date.

## APPENDIX B.

### TITLE 4 DEPARTMENT OF AERONAUTICS

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(Register 70, No. 48—11-28-70)

### SUBCHAPTER 6. NOISE STANDARDS

#### Article 1. General

**5000. Preamble.** The following rules and regulations are promulgated in accordance with Article 3, Chapter 4, Part 1, Division 9, Public Utilities Code (Regulation of Airports) to provide noise standards governing the operation of aircraft and aircraft engines for all airports operating under a valid permit issued by the department. These standards are based upon two separate legal grounds: (1) the power of airport proprietors to impose noise ceilings and other limitations on the use of the airport, and (2) the power of the state to act to an extent not prohibited by federal law. The regulations are designed to cause the airport proprietor, aircraft operator, local governments, pilots, and the department to work cooperatively to diminish noise. The regulations accomplish these ends by controlling and reducing the noise in communities in the vicinity of airports.

**NOTE:** Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

**History:** 1. New Subchapter 6 (§§ 5000-5006, 5010-5014, 5020-5025, 5030-5032, 5035, 5040, 5045-5048, 5050, 5055, 5060-5064, 5065, 5070, 5075, 5080, 5080.1-5080.5) filed 10-25-70; designated effective 12-1-71 (Register 70, No. 48).

**5001. Liberal Construction.** This subchapter shall be liberally construed and applied to promote its underlying purposes which are to protect the public from noise and to resolve incompatibilities between airports and their surrounding neighbors.

**5002. Constitutionality.** If any provision of this subchapter or the application thereof to any person or circumstance is held to be unconstitutional, the remainder of the subchapter and the application of such provision to other persons or circumstances shall not be affected thereby.

**5003. Provisions Not Exclusive.** The provisions of this subchapter are not exclusive, and the remedies provided for in this subchapter shall be in addition to any other remedies provided for in any other law or available under common law. It is not the intent of these regulations to preempt the field of aircraft noise limitation in the state. The noise limits specified herein are not intended to prevent any local government to the extent not prohibited by federal law or any airport proprietor from setting more stringent standards.

**5004. Applicability.** These regulations establish a mandatory procedure which is applicable to and at all existing and future potential airports in California which are required to operate under a valid permit issued by the department. These regulations are applicable (to the degree not prohibited by federal law) to all operations of aircraft and aircraft engines which produce noise. Only those airports which shall have been determined to have a noise problem (in accordance with Section 5050) will be required to perform noise monitoring.

The regulations established by this subchapter are not intended to set noise levels applicable in litigation

arising out of claims for damages occasioned by noise. Nothing herein contained in these regulations shall be construed to prescribe a duty of care in favor of, or to create any evidentiary presumption for use by, any person or entity other than the State of California, the counties and airport proprietors in the enforcement of these regulations.

**5005. Findings.** Citizens residing in the vicinity of airports are exposed to the noise of aircraft operations. There have been numerous instances wherein individual citizens or organized citizen groups have complained about airport noise to various authorities. The severity of these complaints has ranged from a few telephone calls to organized legal action. Many of these cases have been studied by acoustics research workers under sponsorship of governmental and private organizations. These studies have generally shown that the severity of the complaint is principally associated with a combination of the following factors:

- (a) Magnitude and duration of the noise from aircraft operations;
- (b) Number of aircraft operations; and
- (c) Time of occurrence during the day (daytime, evening or night).

There are many reasons given by residents for their complaints; however, those most often cited are interference with speech communication, TV, and sleep. A number of studies have been made related to speech interference and hearing damage, and some studies have been made related to sleep disturbance and other physiological effects. These studies provide substantial evidence for the relationship between noise level and its interference with speech communication and its

effect relative to hearing loss. Significantly less information is available from the results of sleep and physiological studies.

In order to provide a systematic method for evaluating and eventually reducing noise incompatibilities in the vicinity of airports, it is necessary to quantify the noise problem. For this purpose, these regulations establish a procedure for defining a noise impact area surrounding an individual airport. The criteria and noise levels utilized to define the boundaries of the noise impact area have been based on existing evidence from studies of community noise reaction, noise interference with speech and sleep, and noise induced hearing loss.

One of the fundamental philosophies underlying the procedures in these regulations is that any noise quantity specified by these regulations be measurable by relatively simple means. Therefore, these regulations utilize as their basic measure the A-weighted noise level, which is the most commonly accepted simple measure. To insure consistency between criteria and measurement, the units for the criteria are also based on the A-weighted sound level rather than one of the several more complex perceived noise levels.

These regulations provide a procedure to limit the allowable noise for an individual aircraft flyby measured at specified points in the vicinity of the airport. The noise limits are specified in terms of the class of aircraft and measurement location.

The level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a community noise equivalent level (CNEL) value of 65 dB for purposes of these regulations. This criterion

level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep and community reaction.

It is recognized that there is a considerable individual variability in the reaction to noise. Further, there are several factors which undoubtedly influence this variability and which are not thoroughly understood. Therefore, this criterion level does not have a degree of precision which is often associated with engineering criteria for a physical phenomenon (e.g., the strength of a bridge, building, et cetera). For this reason, the state will review the criterion periodically, taking into account any new information which may become available.

**5006. Definitions (a) Sound Pressure Level (SPL):** The sound pressure level, in decibels (dB), of a sound is 20 times the logarithm to the base of 10 of the ratio of the pressure of this sound to the reference pressure. For the purpose of these regulations, the reference pressure shall be 20 micronewtons/square meter ( $2 \times 10^{-4}$  microbar).

**(b) Noise Level (NL):** Noise level, in decibels, is an A-weighted sound pressure level as measured using the slow dynamic characteristic for sound level meters specified in ASA S1.4—1961. American Standard Specification for General Purpose Sound Level Meters, or latest revision thereof. The A-weighting characteristic modifies the frequency response of the measuring instrument to account approximately for the frequency characteristics of the human ear. The reference pressure is 20 micronewtons/square meter ( $2 \times 10^{-4}$  microbar).

(c) *Noise Exposure Level (NEL)*: The noise exposure level is the level of noise accumulated during a given event, with reference to a duration of one second. More specifically, noise exposure level, in decibels, is the level of the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on the reference pressure of 20 micronewtons per square meter and reference duration of one second.

(d) *Single Event Noise Exposure Level (SENEL)*: The single event noise exposure level, in decibels, is the noise exposure level of a single event, such as an aircraft flyby, measured over the time interval between the initial and final times for which the noise level of a single event exceeds the threshold noise level. For implementation in this subchapter of these regulations, the threshold noise level shall be at least 30 decibels below the numerical value of the single event noise exposure level limits specified in Section 5035.

(e) *Hourly Noise Level (HNL)*: The hourly noise level, in decibels, is the average (on an energy basis) noise level during a particular hour. Hourly noise level is determined by subtracting 35.6 decibels equal to  $10 \log_{10} 3600$  from the noise exposure level measured during the particular hour, integrating for those periods during which the noise level exceeds a threshold noise level.

For implementation in this subchapter of these regulations, the threshold noise level shall be a noise level which is 10 decibels below the numerical value of the appropriate criterion CNEL which is specified in Section 5012. At some microphone locations, sources of noise other than aircraft may contribute to the CNEL. Where the airport proprietor can demonstrate that the

accuracy of the CNEL measurement will remain within the required tolerance in Section 5045, the department may grant a waiver to increase the threshold noise level.

(f) *Daily Community Noise Equivalent Level (CNEL)*: Community noise equivalent level, in decibels, represents the average day-time noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and night time periods relative to the day-time period. Community noise equivalent level is calculated from the hourly noise levels by the following:

$$\text{CNEL} = 10 \log \frac{1}{24} \left[ \sum \text{antilog} \frac{\text{HNLD}}{10} + 3 \sum \text{antilog} \frac{\text{HNLE}}{10} + 10 \sum \text{antilog} \frac{\text{HNLN}}{10} \right]$$

Where

HNLD are the hourly noise levels for the period 0700-1900 hours;

HNLE are the hourly noise levels for the period 1900-2200 hours;

HNLN are the hourly noise levels for the period 2200-0700 hours; and  $\Sigma$  means summation.

(g) *Annual CNEL*: The annual CNEL, in decibels, is the average (on an energy basis) of the daily CNEL over a 12-month period. The annual CNEL is calculated in accordance with the following:

$$\text{Annual CNEL} = 10 \log_{10} \left[ \frac{1}{365} \sum \text{antilog} \left( \frac{\text{CNEL}(i)}{10} \right) \right]$$

Where

CNEL(i)—the daily CNEL for each day in a continuous 12-month period, and  $\Sigma$  means summation.

When the annual CNEL is approximated by measurements on a statistical basis, as specified in Section 5022, the number 365 is replaced by the number of days for which measurements are obtained.

(h) *Noise Impact Boundary*: Noise impact boundary around an airport consists of the locus of points for which the annual CNEL is equal to the criterion value.

(i) *Noise Impact Area*: Noise impact area, in square statute miles, is the total land area within the noise impact boundary less that area deemed to have a compatible land use in accordance with Section 5014.

(j) *Airport Proprietor*: Airport proprietor means the holder of an airport permit issued by the department pursuant to Article 3, Chapter 4, Part 1, Division 9, Public Utilities Code.

(k) *Aircraft Operator*: Aircraft operator means the legal or beneficial owner of the aircraft with authority to control the aircraft utilization; except where the aircraft is leased, the lessee is the operator.

(l) *Air Carrier*: Air carrier is any aircraft operating pursuant to either a federal or a state certificate of public convenience and necessity, including any certificate issued pursuant to 49 U.S.C. Section 1371 and any permit issued pursuant to 49 U.S.C. Section 1372.

(m) *General Aviation*: General aviation aircraft are all aircraft other than air carrier aircraft and military aircraft.

(n) *Department*: Department means the Department of Aeronautics of the State of California.

(o) *County*: County, as used herein, shall mean the county board of supervisors or its designee authorized to exercise the powers and duties herein specified.

## Article 2. Airport Noise Limits

**5010. Purpose.** The purpose of these regulations is to provide a positive basis to accomplish resolution of existing noise problems in communities surrounding airports and to prevent the development of new noise problems. To accomplish this purpose, these regulations establish a quantitative framework within which the various interested parties (i.e., airport proprietors, aircraft operators, local communities, counties and the state) can work together effectively to reduce and prevent airport noise problems.

**5011. Methodology for Controlling and Reducing Noise Problems.** The methods whereby the impact of airport noise shall be controlled and reduced include but are not limited to the following:

(a) Encouraging use of the airport by aircraft classes with lower noise level characteristics and discouraging use by higher noise level aircraft classes;

(b) Encouraging approach and departure flight paths and procedures to minimize the noise in residential areas;

(c) Planning runway utilization schedules to take into account adjacent residential areas, noise characteristics of aircraft and noise sensitive time periods;

(d) Reduction of the flight frequency, particularly in the most noise sensitive time periods and by the noisier aircraft;

(e) Employing shielding for advantage, using natural terrain, buildings, et cetera; and

(f) Development of a compatible land use within the noise impact boundary.

Preference shall be given to actions which reduce the impact of airport noise on existing communities. Land use conversion involving existing residential communities shall normally be considered the least desirable action for achieving compliance with these regulations.

**5012. Airport Noise Criteria.** Limitations on airport noise in residential communities are hereby established.

(a) The criterion community noise equivalent level (CNEL) is 65 dB for proposed new airports and for vacated military airports being converted to civilian use.

(b) Giving due consideration to economic and technological feasibility, the criterion community noise equivalent level (CNEL) for existing civilian airports, (except as follows) is 70 dB until December 31, 1985, and 65 dB thereafter.

(c) The criterion CNEL for airports which have 4-engine turbojet or turbofan air carrier aircraft operations and at least 25,000 annual air carrier operations (takeoffs plus landings) is as follows:

<i>Date</i>	<i>CNEL in decibels</i>
Effective date of regulations to 12-31-75 ..	80
1-1-76 to 12-31-80 .....	75
1-1-81 to 12-31-85 .....	70
1-1-86 and thereafter .....	65

**5013. Noise Impact Boundary.** The noise impact boundary at airports which have a noise problem as determined in accordance with Section 5050 shall be established and validated by measurement in accordance with the procedures given in Article 3 of this subchapter. For proposed new airports, or for anticipated changes of existing airports, the noise impact boundary

shall be estimated by applicable acoustical calculation techniques.

The area of land which is within the noise impact boundary and which has incompatible land use is utilized as a measure of the magnitude of the noise problem at an airport. The concepts of noise impact boundary and noise impact area are illustrated in Figure 1.

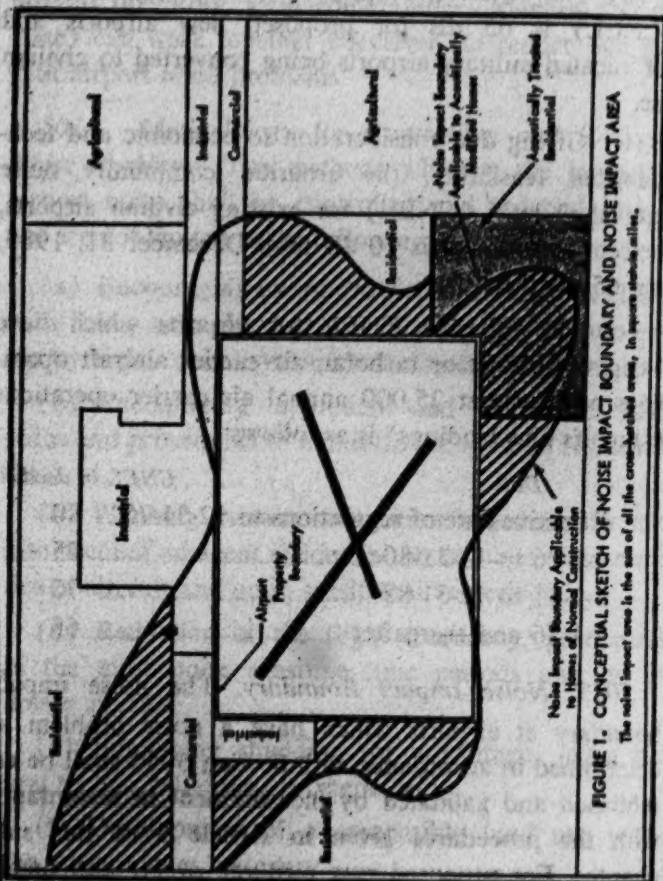


FIGURE 1. CONCEPTUAL SKETCH OF NOISE IMPACT BOUNDARY AND NOISE IMPACT AREA

The noise impact area is the sum of all the cross-hatched areas, in square statute miles.

**5014. Compatible Land Uses Within the Noise Impact Boundary.** The criterion for the noise impact boundary was established for residential uses including single-family and multiple-family dwellings, trailer parks, and schools of standard construction. Certain other land uses may occur within the boundary but be compatible with the community noise equivalent level and hence be excluded in the calculation of noise impact area. For this purpose, the following land uses are deemed compatible:

- (a) Agricultural;
- (b) Airport property;
- (c) Industrial property;
- (d) Commercial property;
- (e) Property subject to an aviation easement for noise;
- (f) Zoned open space;
- (g) High-rise apartments in which adequate protection against exterior noise has been included in the design and construction, together with a central air conditioning system. Adequate protection means the noise reduction (exterior to interior) shall be sufficient to assure that interior community noise equivalent level in all habitable rooms does not exceed 45 dB during aircraft operations. Acoustical performance of the buildings shall be verified by calculation or measured by qualified officials of the building inspection agency of the city or county in which the buildings are situated;
- (h) In the case of existing airports and existing homes only, residential areas in which existing homes have been acoustically treated need not be subject to exterior noise limits quite as strict as those for normal residential construction. For this purpose, the com-

munity noise equivalent level on the boundary of such a residential area may be increased by as much as 15 dB over the community noise equivalent level criterion for nonacoustically treated homes. The amount of the increase allowed on the boundary is the difference between the noise level reduction of the treated home and the value 20 decibels which is assumed to be the noise level reduction of an average normal residence. The noise level reduction of a home is defined as the average difference between aircraft noise levels in free space outside of the home and the corresponding noise levels in rooms on the exposed sides of the home.

In carrying out this section, the actual use to which the land is put, not the classification for which the land is zoned, is determinative.

### Article 3. Establishing and Validating Noise Impact Boundaries for Airports Required to Monitor

*5020. Validation of the Noise Impact Boundary.* For airports with a noise problem (in accordance with Section 5050), the noise impact boundary shall be validated by measurements made at locations specified in Section 5021 and according to frequency requirements specified in Section 5022. These measurements shall be utilized to calculate the daily community noise equivalent levels. These daily CNEL values will then be averaged (on an energy basis) to obtain the annual CNEL at each of the community measurement locations. The location of the noise impact boundary will be considered valid if the value of the annual CNEL lies within  $\pm 1.5$  dB of the criterion value.

*5021. Community Measurement Locations.* At least twelve (12) locations, approximately equidistant, but

not exceeding one and one-half (1.5) statute miles separation, shall be selected along the noise impact boundary. The locations shall be selected such that the maximum extent of the boundary be determined with reference to the airport's flight patterns.

*5022. Frequency of Measurement at Community Locations.* (a) For airports with 1,000 or more homes within the noise impact boundary based on a CNEL of 70 dB, continuous monitoring is required at those monitoring positions which fall within residential areas. Measurement for at least 48 weeks in a year shall be considered as continuous monitoring.

(b) For all other locations and for all locations at other airports, an intermittent monitoring schedule is allowed. The intermittent monitoring schedule shall be designed so as to obtain the resulting annual CNEL as computed from measurements at each location which will correspond to the value which would be measured by a monitor operated continuously throughout the year at that location, within an accuracy of  $\pm 1.5$  dB.

Thus, it is required that the intermittent monitoring schedule be designed so as to obtain a realistic statistical sample of the noise at each location. As a minimum, this requires that measurements be taken continuously for 24-hour periods during four 5-day samples throughout the year, chosen such that for each sample, each day of the week is represented, the four seasons of the year are represented, and the results account for the effect of annual proportion of runway utilization. At most airports, these intermittent measurements can be accomplished by a single portable monitoring instrument.

*5023. Initial Establishment of the Noise Impact Boundary.* The method to be used for initial estab-

lishment of the noise impact boundary of airports required to monitor will vary depending upon specific situations. The following guidelines represent one possible method:

(a) Calculate the approximate location of the noise impact boundary using applicable acoustic estimation techniques.

(b) Select convenient measurement locations on this estimated boundary according to Section 5021.

(c) Make a suitable series of CNEL trial measurements along lines perpendicular to the estimated noise impact boundary. For example, two to three measurements over a one-to-seven day period along a line perpendicular to the estimated noise impact boundary should provide sufficient data to define, within the required accuracy, the nominal position of the noise impact boundary.

Due consideration should be given to the number and time period of aircraft operations, mix of aircraft classes, average runway utilization and other measurable factors which would cause a difference between the trial measurements of CNEL and the expected annual average.

(d) Initiate validation measurements of the noise impact boundary following selection of permanent or intermittent monitoring locations to comply with the validation accuracy criterion specified in Section 5020. For permanent measurement locations at which the measured CNEL lies outside this accuracy criterion, suitable auxiliary measurements or analytical methods may be used to extrapolate the measured CNEL to determine the value on the noise impact boundary. Such extrapolation procedures are subject to approval by the department.

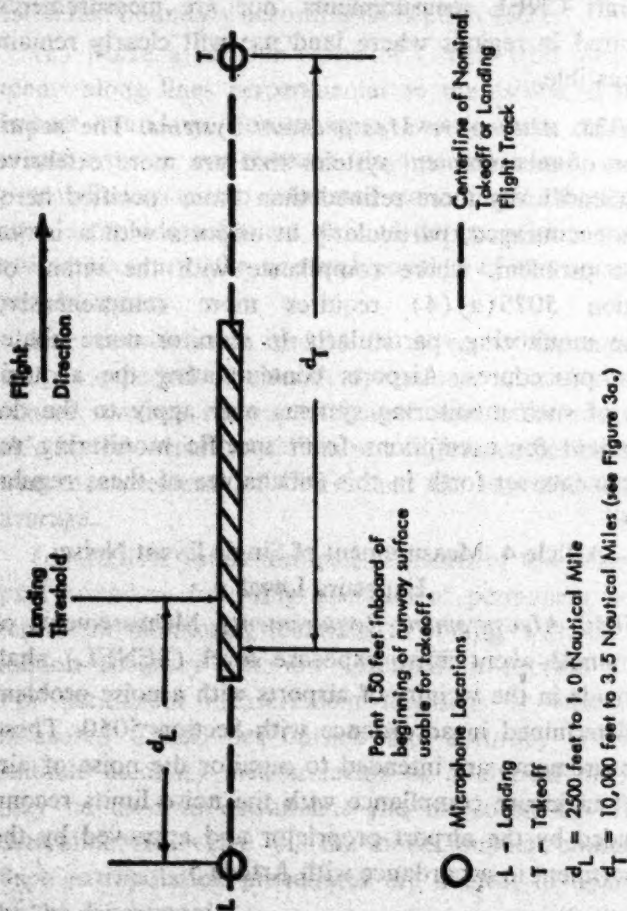
**5024. Deviations from Specified Measurement Locations.** Recognizing the unique geographic and land use features surrounding specific airports, the department will consider measurement plans tailored to fit any airport for which the specified CNEL monitoring locations are impractical. For example, monitors should not be located on bodies of water or at points where other noise sources might interfere with aircraft CNEL measurements, nor are measurements required in regions where land use will clearly remain compatible.

**5025. Alternative Measurement Systems.** The acquisition of measurement systems that are more extensive or scientifically more refined than those specified herein is encouraged, particularly at airports with a major noise problem, where compliance with the intent of Section 5075(a)(4) requires more comprehensive noise monitoring, particularly to monitor noise abatement procedures. Airports contemplating the acquisition of such monitoring systems may apply to the department for exemptions from specific monitoring requirements set forth in this subchapter of these regulations.

#### Article 4. Measurement of Single Event Noise Exposure Level

**5030. Measurement Requirements.** Measurements of the single event noise exposure level (SENEL) shall be made in the vicinity of airports with a noise problem as determined in accordance with Section 5050. These measurements are intended to monitor the noise of aircraft to insure compliance with the noise limits recommended by the airport proprietor and approved by the department in accordance with Article 5.

**5031. Measurement Locations.** Measurements shall be made on the centerline of the nominal takeoff and landing flight tracks for air carrier jet aircraft and private jet aircraft at the locations specified in Figure 2. The nominal flight track is the line projected on the ground under the nominal flight path of the aircraft. Measurements will not be required for landing or take-off flight tracks associated with aircraft operations



**FIGURE 2. SINGLE EVENT NOISE EXPOSURE LEVEL MONITORING POSITIONS**

which do not contribute to the noise impact area of the airport.

*5032. Frequency of Measurement.* At each microphone location, single event noise exposure level measurements shall be made continuously for a minimum of 48 weeks per year. The remaining 4 weeks are intended to allow for intermittent periods of down-time for equipment maintenance and calibration.

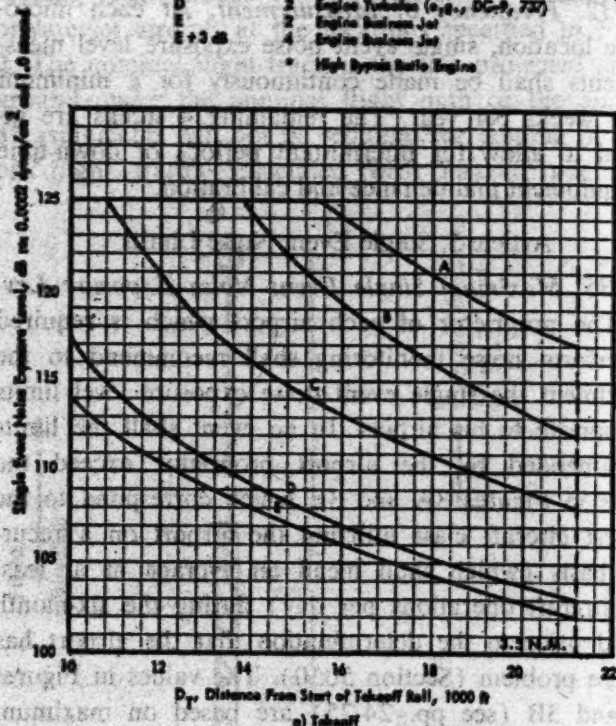
#### Article 5. Single Event Noise Limits

*5035. Maximum Single Event Noise Exposure Levels.* The proprietor of each airport which is required to perform noise monitoring shall recommend to the department the single event noise exposure level limits appropriate to his airport. In no event shall the limits recommended by the airport proprietor exceed the values in Figures 3A and 3B which correspond to the noisiest aircraft class utilizing the airport on a recurrent basis (which shall mean an average of at least two aircraft operations per day) during the six-month period prior to the determination that the airport has a noise problem (Section 5050). The values in Figures 3A and 3B (see pp. 24-25) are based on maximum gross weight operation without noise abatement flight procedures under standard atmospheric conditions at sea level. Airport proprietors are therefore encouraged to recommend lower limits. Upon approval of such limits at a specific airport, those limits will be enforced by the county in accordance with this entire subchapter of these regulations.

#### Article 6. Additional Monitoring Locations

*5040. Additional Monitoring Locations.* For airports which are required to monitor, additional monitoring locations may be useful in some cases. These additional

Curve	Altitude Class
A	4 Engine Turbojet Turboprop (e.g., 707, 720, DC-8)
B	4 Engine "Jumbo" Turboprop (e.g., 747)
C	3 Engine Turboprop and Airliner (e.g., 720, DC-10, L-1011)
D	2 Engine Turboprop (e.g., DC-9, 737)
E	2 Engine Business Jet
E+3 dB	4 Engine Business Jet
	* High Bypass Ratio Engine

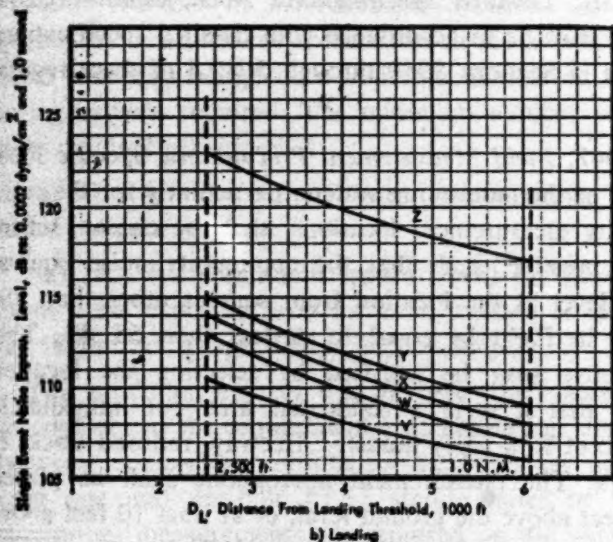


**FIGURE 3A. MAXIMUM LIMITS FOR SINGLE EVENT NOISE EXPOSURE LEVEL**

locations may be utilized for measurement of either single event noise exposure levels (such as monitoring of noise abatement flight procedures) or community noise equivalent levels (such as at fixed points in high noise level residential areas). The frequency of measurement at these additional monitoring locations should be determined on the basis of each specific situation.

Cat	Aircraft Class
Z	4 Engine Turbojet and Turbofan (e.g., 707, 720, DC-8)
Y	2,3 Engine Turbofan (e.g., 727, 737, DC-9)
X	4 Engine "Jumbo" Turbofan* (e.g., 747)
W	3 Engine Airbus Turbofan* (e.g., DC-10, L-1011)
V	2 Engine Business Jet
V+3 dB	4 Engine Business Jet

\* High Bypass Ratio Engine



**FIGURE 3B. MAXIMUM LIMITS FOR SINGLE EVENT NOISE EXPOSURE LEVEL**

## Article 7. Noise Monitoring System Requirements

**5045. General Specifications.** (a) The noise monitoring system shall provide for the following outputs:

(1) In the vicinity of airport (see Article 5). Single event noise exposure levels exceeding the maximum limits, together with their time of occurrence.

(2) In community (see Section 5020). Hourly noise level for each hour of the day, together with identification of the hour.

(b) The overall accuracy of the noise measurement system shall be  $\pm 1.5$  dB, determined in accordance with the procedure of the noise measurement system specification given in Sections 5080 through 5080.5 of these regulations.

**5046. Detailed Specifications.** Noise monitoring systems shall be in accordance with detailed specifications given in Sections 5080 through 5080.5 of these regulations.

**5047. Field Measurement Precautions.** Specific locations of the monitoring system, particularly for the community measurement locations, shall be chosen, whenever possible, such that the community noise equivalent level at the location from sources other than aircraft in flight be equal to or less than 55 dB. This objective may be satisfied by selecting the location such that it is in a residential area not immediately adjacent to a noisy industry, freeway, railroad track, et cetera. The measurement microphone shall be placed 20 feet above the ground level, or at least 10 feet above neighboring roof tops, whichever is higher. To the extent practicable, the following precautions shall be followed:

(a) Each SENEL monitor location shall be in an open area surrounded by relatively flat terrain, having no excessive sound absorption characteristics such as might be caused by thick, tall grass, shrubbery, or wooded areas.

(b) No obstructions which significantly influence the sound field from the aircraft shall exist within a conical space above the measurement position, the cone being defined by an axis along a line of sight normal to the aircraft path and by a half angle of 75 degrees from this axis.

(c) When the foregoing precautions are not practicable, the microphones shall be placed at least 10 feet above neighboring buildings in a position which has a clear line-of-sight view to the path of the aircraft in flight.

**5048. Number of Measurement Systems.** The frequency of measurement specified in Sections 5022 and 5032 has been designed to limit the number of monitoring systems required. The minimum number of systems required per airport is:

(a) One for intermittent measurements of the noise impact boundary, plus

(b) One for continuous measurement of the single event noise exposure level for each landing or departure flight track as specified in Section 5031.

This minimum number will increase where necessary to conform to the requirement that separation distance between monitoring positions on the boundary not exceed one and one-half (1.5) statute miles or when continuous measurements are required on the measurement boundary in accordance with Section 5022.

## Article 8. Implementation by Counties

**5050. Counties.** (a) The county wherein an airport is situated shall enforce this subchapter of these regulations.

(b) In recognition of the requirement to allow the maximum amount of local control and enforcement of this regulation, the county shall determine which of the airports within its boundaries are required to initiate aircraft noise monitoring in accordance with these regulations. The county shall require noise monitoring by the airports within its boundaries that are deemed

to have a noise problem as determined by the county. For airports with joint use by both military and civilian aircraft operations, the determination of the existence of a noise problem shall be based upon the civilian operations. In making a determination that a noise problem exists around an airport, the county shall:

(1) Investigate the possible existence of a noise impact area greater than zero based on a CNEL of 70 dB, and determine whether or not people actually reside inside the noise impact boundary;

(2) Review other information that it may deem relevant, including but not limited to complaint history and legal actions brought about by aircraft noise; and

(3) Coordinate with, and give due consideration to the recommendations of, the county airport land use commission (as defined in Public Utilities Code Section 21670).

(c) Any affected or interested person or any government agency disagreeing with the county's findings regarding the existence of a noise problem at a given airport may file an appeal with the department. Upon receipt of such an appeal, the department shall make an investigation and determination as to the validity of the county's findings. The department shall serve by mail the written record of such investigation and determination to the county, the airport proprietor, and the affected or interested person or governmental agency. If the department finds that the county's determination does not correspond to the facts, the county shall adhere to the determination of the department. Whenever the department has served such record, the county, airport proprietor, affected or interested person,

or government agency may in writing within 10 days demand a hearing. In such case, the department shall file a statement of issues and shall conduct proceedings in accordance with the Administrative Procedure Act (Chapter 5, Part 1, Division 3, Title 2, Government Code).

(d) For all airports required to perform noise monitoring, the counties shall validate monitoring data supplied by the airport proprietor and shall enforce these regulations in all respects.

(e) The county shall submit quarterly reports to the Department of Aeronautics. Each report is due 45 days after the end of the quarter of the calendar year covered in the report. The report shall contain at least the following information on each airport within the county covered by these regulations:

(1) A map illustrating the location of the noise impact boundary, as validated by measurement, and the location of measurement points, in the four preceding quarters;

(2) The annual noise impact area as obtained from the preceding four calendar quarters, and as obtained in accordance with Article 2 of this subchapter of these regulations;

(3) The daily CNEL measurements, together with identification of the dates on which each measurement was made, number of total aircraft operations during the quarter, estimated number of operations of the highest noise level aircraft class in the quarter, and any other data which is pertinent to the activity during the quarter. In addition, the HNL data shall be retained for at least 3 years, and made available to the department upon request; and

(4) The total number of recorded violations of the single event noise exposure level limits, subtotals of such violations categorized by aircraft class, a list of the names of the aircraft operations in question, the number of violations by each, the single event noise exposure level corresponding to each violation, and the disposition made or fine collected for each violation.

(f) The counties shall establish the requirements for identification of aircraft operators whose aircraft exceed the single event noise exposure levels in Article 5 of Subchapter 6 of these regulations.

(g) The department will maintain in file, for a period of at least 3 years, all the noise data received pursuant to these regulations. These records shall be maintained in accordance with the provisions of the California Public Records Act (Chapter 3.5, Division 1, Title 1, Government Code).

#### Article 9. Implementation by Aircraft Operators

**5055. Aircraft Operators.** No operator of an aircraft shall operate any aircraft in excess of the single event noise exposure level limits adopted in accordance with Article 5 of this subchapter of these regulations. No violation exists if the operator establishes that such operation is the direct result of the pilot's exercise of his responsibility for safety of the passengers, crew, cargo and aircraft or of his emergency authority. Violation of such limits is punishable as prescribed in Public Utilities Code Section 21669.4.

## Article 10. Implementation by Airport Proprietors

**5060. Monitoring Requirements.** (a) All airport proprietors shall cooperate with the county in the county's investigations to determine the existence of a noise problem, and shall furnish such data as the county may require.

(b) Each airport proprietor whose airport is determined to have a noise problem shall measure, establish and validate noise impact boundaries, monitor as required in Articles 3, 4 and 7 of this subchapter of these regulations, and shall furnish such data as the county may require.

**5061. Single Event Noise Limit Violations.** No airport proprietor shall knowingly permit any aircraft operator to exceed the single event noise exposure level limits established in accordance with Article 5 of this subchapter of these regulations.

**5062. Noise Impact Area Violations.** No airport proprietor shall operate his airport with a noise impact area of other than zero unless said operator has a variance as prescribed in Article 13 of this subchapter of these regulations.

**5063. Submittal of Monitoring Plan.** Each airport proprietor who is required to perform noise monitoring shall submit a description of his monitoring plan to the county and to the department for approval. Such descriptions shall contain at least the following information:

(a) The general monitoring system plan, including at least locations and instrumentation;

(b) Justification for any proposed deviations from the measurement system locations specified in these regulations;

(c) Statistical sampling plan proposed for intermittent monitoring at community locations;

(d) The proprietor's recommended single event noise limits for his airport; and

(e) Additional information as pertinent or as requested by the department.

**5064. *Grounds for Approval.*** Failure of the airport proprietor to comply with the provisions of Subchapter 6 of these regulations constitutes a ground for denial of approval of an airport site within the meaning of Public Utilities Code, Section 21666.

#### Article 11. Implementation by the Department

**5065. *Implementation by the Department.*** The department will review the data submitted quarterly by the counties for the purpose of assessing the degree of compliance with this subchapter of these regulations. The department's review will include, but not be limited to, observation of any changes in boundary monitor positions and any changes in numerical values of CNEL.

#### Article 12. Schedule of Implementation

**5070. *Schedule of Implementation.*** (a) For airports in existence on the effective date of this subchapter of these regulations, counties shall complete their determination of whether or not a noise problem exists within the shortest feasible time after the effective date of these regulations. In no event shall the time for completion of this determination exceed 6 months from the effective date of these regulations.

(b) Each proprietor of an airport that has a noise problem, upon receipt of notification from the county, shall initiate noise monitoring within the shortest feasible

ible time not to exceed 6 months in accordance with this subchapter of these regulations and concurrently shall make application to the department for a temporary variance in accordance with Article 13.

### Article 13. Variances

5075. *Variances.* (a) In granting variances, the department shall be guided by the underlying intent of these regulations as follows:

(1) That the noise impact area surrounding proposed new airports be zero;

(2) That the proprietor of each existing airport having a surrounding noise impact area of zero based on a CNEL of 70 dB take actions to prevent a noise impact area of greater than zero;

(3) That the proprietor of each existing airport having a surrounding noise impact area of greater than zero based on a CNEL of 70 dB take actions to prevent an increase of the airport's noise impact area; and

(4) That the proprietor of each existing airport having a surrounding noise impact area of greater than zero based on a CNEL of 70 dB be required to develop and implement programs to reduce the noise impact area of the airport to an acceptable degree in an orderly manner over a reasonable period of time.

(b) An airport proprietor may request variances from the requirements of any or all of these regulations, except for Sections 5012 and 5013, for periods of not exceeding one year as set forth hereinafter:

(1) The airport proprietor shall apply to the department for a variance.

(2) Such application for variance shall be made upon a form which the department shall make available.

(3) Such application shall set forth the reasons why the airport proprietor believes said variance is necessary. The application shall state the future date by which the airport proprietor expects to achieve compliance with the regulations from which a variance is sought. The application shall set forth an incremental schedule of noise impact area reductions for the intervening time.

(4) The department may grant a variance if the public interest would be satisfied by such a variance. In weighing the public interest, the department's considerations include but are not limited to the following:

(A) The economic and technological feasibility of complying with the noise standards set by these regulations;

(B) The noise impact should the variance be granted;

(C) The value to the public of the services for which the variance is sought; and

(D) Whether the airport proprietor is taking *bona fide* measures to the best of his ability to achieve the noise standards set by these regulations.

(5) The burden of proof shall be upon the applicant for a variance.

(6) On its own motion, or upon the request of an affected or interested person, the department shall hold a public hearing in connection with the approval of an application for a variance. Any

interested person may obtain from the department information on pending requests for variances at any time.

(7) The department in granting a variance may impose reasonable conditions which it deems necessary to effectuate the purposes of this subchapter of these regulations.

#### Article 14. Specification: Noise Monitoring System

*5080. Purpose and Scope.* (a) *Purpose.* This specification establishes the minimum requirements for instrumentation to be utilized by agencies required to monitor aircraft noise in accordance with Articles 1 through 13 of this subchapter of these regulations.

(b) *Scope.* Two measurement systems are defined herein. One system shall be utilized to monitor the noise at specifically-designated locations adjacent to airport runways. The second system shall be utilized to monitor noise levels at specifically-designated locations in the community surrounding the airport.

(c) *Design Goals.* The design goals for the monitor system are accuracy, reliability, and ease of maintenance. The measurement techniques set forth are sufficiently uncomplicated so that current state-of-the-art instrumentation equipment may be utilized to configure the two systems. Analysis and recording techniques vary; however, this specification delineates a procedure whereby maximum commonality of systems elements may be achieved.

The monitor system specifications are not intended to be unduly restrictive in specifying individual system components. The specifications allow the utilization of equipment ranging from analog systems to automated

computer systems. The exact configuration will depend upon the specific monitoring requirement and the nature of existing user instrumentation.

This is a total systems specification. It is the prerogative of the user to configure the system with components which will be most compatible with his existing equipment and personnel.

**5080.1. Additional Definitions Applicable to Article 14.** (a) *Field Instrumentation.* Refers to those elements of a noise monitoring system that are exposed to the outdoor environment in the vicinity of the measurement microphone. This equipment must function within specification during exposure to a year-around environment adjacent to any airport licensed by the state of California.

(b) *Centralized Instrumentation.* Refers to those elements of the noise monitoring system which will be contained in an environmentally-controlled room.

(c) *SENEL Monitoring System.* The SENEL monitoring system shall measure single event noise exposure levels exceeding the maximum allowable single event noise exposure level and shall log the time of occurrence of each such event. An SENEL system consists of two subsystems: a noise level subsystem and an integrator/logger subsystem.

(d) *HNL Monitoring System.* The HNL monitoring system shall measure the hourly noise level and shall provide identification of the hour. This system shall be deployed as a community monitoring system. An HNL system consists of two subsystems: a noise level subsystem and an integrator/logger subsystem.

(e) *Noise Level Subsystem.* This term defines a subsystem composed of a microphone, an A-weighted

filter, a squaring circuit and a lag network. This subsystem is used to derive a signal representing the mean square. A-weighted value of acoustic pressure.

(f) *Integrator/Logger Subsystem.* This term defines a subsystem composed of a threshold comparator, an integrator, a clock, an accumulator, a logger or printer, an SENEL comparator (SENEL system only), and a logarithmic converter. This subsystem shall be used to transform the output from a noise level subsystem in excess of a pre-set threshold into SENEL or HNL.

#### 5080.2. *Examples of Possible System Configurations.*

(a) *Approach.* Two systems have been defined: (1) the SENEL monitoring system, and (2) the HNL monitoring system. There are many possible methods of configuring systems to produce SENEL data and HNL data. These systems may be analog systems, digital systems, or combined analog and digital systems. Figures 4 and 5 illustrate two configurations which can provide SENEL and HNL measurements. The system configurations described herein are presented for information only and not as specific design criteria.

(b) *SENEL System Configuration.* An SENEL system may be composed of the following elements:

##### (1) *Noise Level Subsystem.*

(A) *Microphone.* The microphone converts acoustic data to an equivalent electrical voltage.

(B) *A-Weighting Filter Network.* This filter modifies the voltage from the microphone system so that its frequency characteristics are shaped to an A-weighted, relative response in accordance with weighing curve A in ASA S1.4-1961, or latest revision thereof.

(C) *Squaring Circuit*. This circuit provides a continuous, instantaneous square of the value of the electrical signal delivered from the A-weighting network.

(D) *Lag Network*. This circuit may be a first order lag (single-pole filter) used to smooth the output of the squaring circuit for delivery to subsequent circuits. The lag network provides a slow dynamic characteristic as defined for a sound level meter in ASA S1.4-1961, or latest revision thereof.

## (2) *SENEL Integrator/Logger Subsystem*.

(A) *Threshold Comparator*. This device generates an output signal during the time its input exceeds a preset threshold level.

(B) *Integrator*. This circuit provides an output signal which is the definite time-integral of the input signal. The input is a slowly-varying, smooth, unipolar signal delivered from the lag network. The integrator has three operational states: integrate or run, hold, or reset. These states would be controlled by the threshold-comparator. Initially, before the integrator input signal exceeds the threshold signal, the integrator is held in reset. When the threshold is exceeded, the integrator is set in the integrate state, causing the output to be the time-integral of the input. When the input next falls below the threshold, the integrator is set into the hold state. The output of the integrator is, at hold time, the time-integral of the input while it exceeded the measurement threshold. The same signal causing hold would be used to read the

output of the integrator and the true time when the hold command occurred. Following those readings, the integrator would be returned to a reset state.

(C) *Sample and Hold (Optional)*. This circuit may be used to store the value of the integral at the time of integrator hold to minimize the time required for the integrator to be maintained in hold.

(D) *Clock*. This device generates true time which may be directed to a logger upon an integrator-hold command.

(E) *Logarithmic Converter*. This element is used to convert the integrated mean square sound pressure output from the integrator (or sample and hold) into an SENEL having start time and stop time defined by the threshold circuit and a reference duration equal to one second. The reference duration may be introduced as a gain (or loss) term at the input to the log-converter or as a voltage offset at the output from the logarithmic converter.

(F) *SENEL Level Comparator*. The SENEL comparator controls the actual printing/logging operation. If the signal appearing at the output of the logarithmic converter exceeds a pre-determined value, the comparator will issue a print command. If the pre-determined value is not exceeded, the event is not recorded.

(G) *Logging Element*. This element may be a printer which can concurrently or sequentially print out values of true time and SENEL.

(c) *HNL System Configuration.* An HNL system may be composed of the following elements:

(1) *Noise Level Subsystem.* The HNL noise level subsystem is identical to the SENEL noise level subsystem.

(2) *HNL Integrator/Logger Subsystem.* The HNL integrator/logger subsystem is similar to the SENEL subsystem, as noted below.

(A) *Threshold Comparator.* Similar except that the threshold level is adjustable over a different but potentially overlapping range.

(B) *Integrator.* Similar, except that the integrator is controlled in its reset, run, and hold states so that (1) it integrates for some fixed period of time, e.g., 60 seconds, (2) it "holds" only long enough to transfer out the output value for that fixed period integration, and (3) it "resets" only long enough to return the output to zero so that another "integrate" period may be initiated.

(C) *Sample and Hold (Optional).* Similar.

(D) *Clock.* This device controls the timing of the integrator and the accumulator readout.

(E) *Logarithmic Converter (Optional).* This element is used to convert the accumulated integrated noise level to a logarithmic quantity proportional to HNL.

(F) *SENEL Level Comparator.* Not required.

(G) *Logging Element*. Similar, except substitute HNL for SENEL.

(H) *Accumulator*. This device is used to store output of the integrator for all events exceeding the threshold level within a 3600 second period. A print command signal is also provided on the hour to the logger/printer at one hour intervals.

**5080.3 Performance Specifications.** (a) *Overall Accuracy*. The overall accuracy of both systems shall be  $\pm 1.5$  dB when measuring noise from aircraft in flight. It is the intent of the following specifications to verify this accuracy with laboratory simulation.

(b) *Noise Level Subsystem*.

(1) *Frequency Response and Microphone Characteristics*. The frequency response, and associated tolerance of the subsystem, shall be in accordance with IEC Publication 179 entitled "Precision Sound Level Meters," paragraphs 4, 5 and 8 for the A-weighting network, to be superseded by the specifications for the Type 1 precision sound level meter in the latest revision of ASA S1.4-1961, when available.

(2) *Dynamic Range*. The system output shall be proportional to the antilog of the noise level over a noise level range of 60 dB to 120 dB.

(A) For the SENEL subsystem, this range may be covered in 30 dB or greater increments through the use of attenuators. The noise level for each attenuator range shall be at least 40 dB

below full scale. Full scale range shall apply to signals with a crest factor as great as 3:1.

(B) For the HNL subsystem, the internal electrical noise shall not exceed an equivalent input noise level of 50 dB, and the full scale range of 120 dB shall apply to signals with a crest factor as great as 3:1.

(3) *Linearity.* The electrical amplitude response to sine waves in the frequency range of 22.4 Hz to 11,200 Hz shall be linear within one decibel from 30 dB below each full scale range up to 7 dB above the full scale range on any given range of the instrument.

(c) *Integrator/Logger Subsystem.*

(1) *Threshold Comparator.* For SENEL, the threshold level shall be selectable in steps of no greater than 10 dB over a noise level range of at least 60 to 90 dB. For HNL, the threshold level shall be adjustable over a noise level range of at least 55 to 70 dB. In both cases, threshold triggering shall be repeatable with  $\pm 0.5$  dB.

(2) *SENEL Comparator.* The maximum allowable SENEL shall be selectable over an SENEL range of 85 to 125 dB. Comparator sensing shall be repeatable within  $\pm 0.5$  dB.

(3) *Clock.* The clock shall be capable of being set to the time of day within an accuracy of 10 seconds and shall not drift more than 20 seconds in a 24-hour period. For SENEL, the clock output which identifies the start or stop time of the single event shall be readable within one second.

(4) *End-to-End Accuracy.* The end-to-end accuracy of the integrator/logger subsystem is defined in terms of a unipolar, positive-going square wave input. The logged, integrated output of the system should fall within  $\pm 1$  dB of the true value predicted for the wave of a given duration at an amplitude exceeding the measurement threshold by at least 1 dB, and at all higher amplitudes within the range. The square wave shall be applied at the input to the integrator and level comparator.

(A) *SENEL Integrator/Logger Subsystem.*

For square waves defined at all frequencies between 0.025 and 1.0 Hz, the subsystem shall output the SENEL exceeding the maximum allowable SENEL and its time of occurrence to demonstrate end-to-end accuracy.

(B) *HNL Integrator/Logger Subsystem.*

1. For each hour during which no noise event exceeds the HNL system noise level threshold, the subsystem shall output the time on the hour, and indicate that the antilog of the HNL for the preceding hour is zero.

2. The end-to-end accuracy shall be determined over the range of HNL from 45 dB to 95 dB for each combination of the following conditions which gives a value in this range:

a. Square waves, as defined above, shall have durations of 1, 3, 10, 30 and 100 cycles.

b. Square waves shall be at frequencies of 0.025, 0.05, 0.10 and 0.20 Hz.

c. Square waves shall have amplitudes which are equivalent to noise levels of 70, 80, 90, 100 and 110 dB.

(d) *Overall System Accuracy Demonstration.* The overall system accuracy shall be demonstrated for several conditions within each of the following ranges, utilizing a 1000 Hz sinusoidal acoustic plane wave oriented along the preferred plane wave axis of the microphone, or an equivalent signal generated in an acoustic coupler:

*(1) SENEL Monitoring System.*

(A) The SENEL comparator shall be set at several values of interest, including at least 95, 105, 115 and 125 dB.

(B) The durations of the sinusoidal acoustic signals shall include at least 5, 10, 20 and 40 seconds.

(C) The noise levels for the acoustic inputs at each of the above durations shall be set at levels calculated to produce SENEL's of—  
—1.5, +1.5 and +10 dB relative to the SENEL comparator setting.

*(2) HNL Monitoring System.*

(A) The noise levels for the acoustic inputs shall include at least values of 70, 80, 90 and 100 dB.

(B) The durations of the sinusoidal acoustical signals shall include at least 5, 10, 20 and 40 seconds.

(C) Each of the events defined by the above combinations shall be repeated 1, 3, 10, 30 and 100 times per one hour test to obtain the HNL resulting from such repetition. The HNL accuracy for each combination is defined as the difference between the calculated and measured value for each test. Tests are not required for those combinations which produce a calculated HNL value outside the range of 45 dB to 95 dB.

*5080.4 Field Calibration.* The monitoring system shall include an internal electrical means to electrically check and maintain calibration without resort to additional equipment. Provision shall also be made to enable calibration with an external acoustic coupler.

*5080.5. Environmental Precautions and Requirements.* (a) The field instrumentation shall be provided with suitable protection such that the system performance specified will not be degraded while the system is operating within the range of weather conditions encountered at airports within the State of California.

(b) *Humidity.* The effect of changes in relative humidity on sensitivity of field instrumentation shall be less than 0.5 decibel at any frequency between 22.4 and 11,200 Hz in the range of 5 to 100 percent relative humidity.

(c) *Vibration.* The field instrumentation shall be designed and constructed so as to minimize the effects of vibration resulting from mechanical excitation. Shock mounting of the field instrumentation shall be provided as required to preclude degradation of system performance.

(d) *Acoustic Noise.* The field instrumentation shall be designed and constructed so as to minimize effects of vibration resulting from airborne noise, and shall operate in an environment of 125 dB SPL—broadband noise over a frequency range of 22.4 to 11,200 Hz—without degradation of system performance.

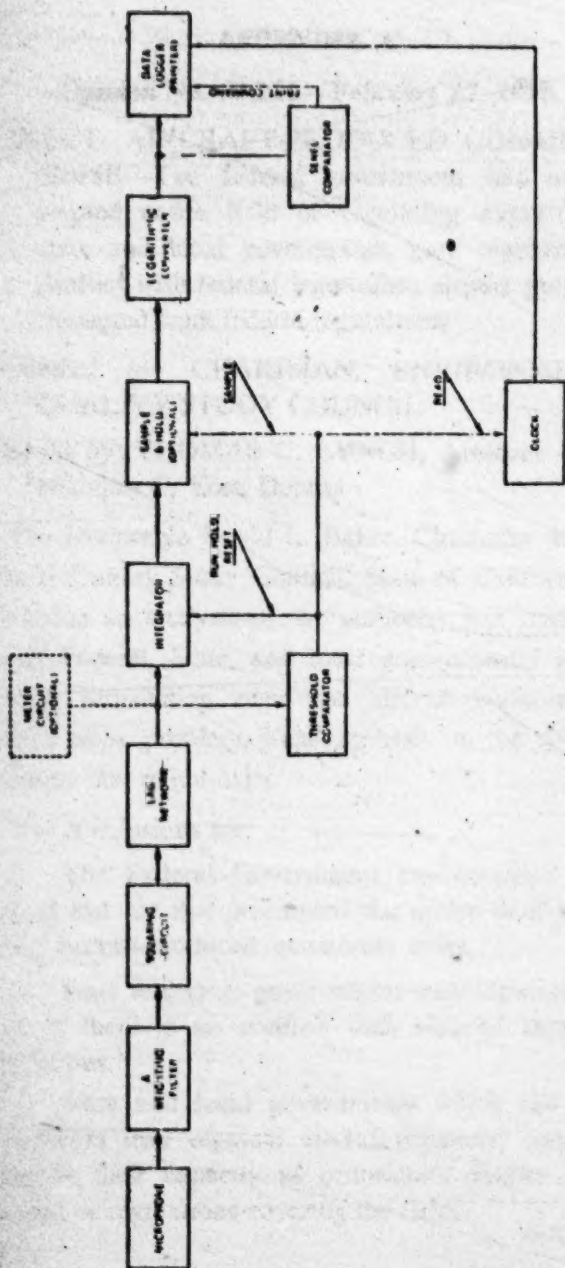


FIGURE 4. TYPICAL SINGLE EVENT NOISE EXPOSURE LEVEL (SENEL) SYSTEM

## APPENDIX C.

**Opinion No. 69-216—February 27, 1970.**

**SUBJECT: AIRCRAFT-PRODUCED COMMUNITY NOISE**—The federal government has not preempted entire field of regulating aircraft noise; state and local governments may regulate if no conflict with federal legislation; airport proprietors exempted from federal regulations.

*Requested by:* CHARIMAN, ENVIRONMENTAL QUALITY STUDY COUNCIL

*Opinion by:* THOMAS C. LYNCH, Attorney General  
Nicholas C. Yost, Deputy

The Honorable David L. Baker, Chairman, Environmental Quality Study Council, State of California, has requested an analysis of the authority and responsibility of Federal, State, and local governmental agencies having jurisdiction over the aircraft-produced community noise problem, with emphasis on the voids and overlaps that might exist.

The conclusions are:

1. The Federal Government has occupied a portion of but has not preempted the entire field of regulating aircraft-produced community noise.
2. State and local governments may legislate in the field if there is no conflict with Federal statutes or regulations.
3. State and local governments which are airport proprietors may regulate aircraft-produced community noise in their capacity as proprietors despite Federal statutes or regulations covering the field.

4. State and local governments may regulate aircraft-produced community noise by land use controls such as airport siting and zoning without restriction by the Federal government.

### ANALYSIS

The "commerce clause" of the United States Constitution (Art. I, § 8, cl. 3) vests in Congress the power to regulate interstate and foreign commerce. The "supremacy clause" (Art. VI, par. 2) provides that the Constitution and laws of the United States are the supreme law of the land.

The federal regulation of aviation represents Congressional exercise of its power to regulate interstate commerce. See *Braniff Airways, Inc. v. Nebraska State Board of Equalization and Assessment*, 347 U.S. 590, 596 (1953); *Rosenhan v. United States*, 131 F.2d 932, 935 (10th Cir. 1942) cert. denied 318 U.S. 790. The regulations adopted thereunder, themselves have the force of law. *McClenny v. United Air Lines, Inc.*, 178 F. Supp. 372, 375 (W.D. Mo. 1959).

When the Federal Government has legislated in a field of interstate commerce, to what extent may states and localities act? They may not do so if the subject is one requiring national uniformity. (*Morgan v. Virginia*, 328 U.S. 373, 386 (1945); *Southern Pacific Co. v. Arizona*, 325 U.S. 761, 767, 783-784 (1945); *South Carolina Highway Dept. v. Barnwell Bros.*, 303 U.S. 177, 185-187 (1938).) When commerce is national in character, requiring a uniform system, Congress may by its inaction indicate its will that the commerce be unregulated. (*Leisy v. Hardin*, 135 U.S. 100, 109-110 (1890).) Generally, the states may act if the federal law has not fully occupied the field (*Kelly v.*

*Washington*, 302 U.S. 1, 9-14 (1937)), or there is no conflict with the federal legislation (*California v. Zook*, 336 U.S. 725, 733 (1949); *Kelly v. Washington*, supra, pp. 4-8), and if the state law does not discriminate against, substantially obstruct or unreasonably burden interstate commerce (*Dean Milk Co. v. Madison*, 340 U.S. 349, 354 (1951); *Parker v. Brown*, 317 U.S. 341, 360 (1943); *California v. Thompson*, 313 U.S. 109, 114 (1941); *Buck v. Kuykendall*, 267 U.S. 307, 315 (1924). With the qualifications stated above, the fact that the Federal Government has acted in a field of interstate commerce does not prevent concurrent action by the states. *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440, 442 (1960); *Southern Pacific Co. v. Arizona*, supra, at 766-767; *Cooley v. Board of Wardens*, 53 U.S. 298, 318-320 (1851); see 24 Ops. Cal. Atty. Gen. 129.

The essential question is the degree to which federal legislation under the commerce clause has precluded state and local governments from acting.

To what extent has the Federal Government acted? The Federal Airport Act of 1946 granted authority to the Federal Government, through the Federal Aviation Agency (FAA), to control the development of airports. 49 U.S.C. §§ 1101-1120; see 49 U.S.C. § 1655(c) regarding transfer of functions. As amended to date the act directs the Federal Aviation Administrator to formulate and annually revise a National Airport Plan which is to specify in terms of general location and type of development, projects the Administrator considers necessary to provide a system of public airports to meet the needs of civil aviation. 49 U.S.C. § 1102. The act further authorizes the Administrator to make financial grants to public agencies to establish

a nationwide system of public airports in conformity with the National Plan. 49 U.S.C. § 1103; see 49 U.S.C. §§ 1349-1350. The legislative history refers to the goal of the 1946 act as "a national system of airports independently located and planned for the integrated use of the nation." U.S. Cong., House, II Legislative History of Federal Airport Act, 1958, at 576.

The Federal Aviation Act of 1958 charges the Federal Aviation Administrator with the duty to make plans and policy with respect to development and use of the navigable airspace and to assign and regulate its use. 49 U.S.C. §§ 1348, 1353; see 49 U.S.C. §§ 1655(c) and 1657(f) with respect to transfer of functions. The act also declares that the United States possesses and exercises "complete and exclusive national sovereignty in the airspace of the United States, . . ." 49 U.S.C. § 1508. It further recognizes that there exists on behalf of any United States citizen a "public right of freedom of transit" through the nation's navigable airspace. 49 U.S.C. § 1304; see 49 U.S.C. § 1301(24).

The Federal Aviation Administrator is charged with the duty of prescribing air traffic rules and regulations governing the flight of aircraft for the navigation, protection, and identification of aircraft, the protection of persons and property on the ground, and for the efficient utilization of the navigable airspace. 49 U.S.C. § 1348(c). This includes rules as to safe altitudes of flights and rules to prevent collision between aircraft and other aircraft, land or water vehicles, and airborne objects. *Ibid.*

The Administrator is further charged with the duty of adopting rules and regulations to promote safety of

flight. 49 U.S.C. § 1421(a). These include rules concerning aircraft design, materials, workmanship, construction, and performance, appliance standards, inspection standards, reserve supplies, maximum hours of work, and national security and safety in air commerce. *Ibid.*

The Administrator is authorized to issue air carrier operating certificates and establish minimum safety standards for the operation of any carrier to whom such a certificate has been issued. 49 U.S.C. § 1424. He also issues airman certificates and aircraft certificates. 49 U.S.C. §§ 1422-1423.

The Administrator is further authorized to acquire, establish, improve, inspect, classify, and rate air navigation facilities including airports and weather dissemination, signaling, radio-directional finding, radio, and other electrical communication equipment. 49 U.S.C. §§ 1348(b), 1426; *see* 49 U.S.C. § 1301(8).

The Administrator may, in consultation with the Department of Defense, establish airspace zones where aircraft are restricted or prohibited. 49 U.S.C. § 1522.

A 1968 amendment to the Federal Aviation Act of 1958 directs the Administrator to prescribe and amend standards for the measurement of aircraft noise and sonic boom and to prescribe and amend rules and regulations "to provide for the control and abatement of aircraft noise and sonic boom, . . ." 49 U.S.C. § 1431(a). The criteria which the Administrator is mandated to consider include research, safety, economic reasonableness, and technological practicability. 49 U.S.C. § 1431(b).

Regulations have been adopted pursuant to the Federal Aviation Act of 1958 governing airspace (14

C.F.R. Pts. 71-77), air traffic and general operating rules (14 C.F.R. Pts. 91-105), air carriers (14 C.F.R. Pts. 121-137), schools (14 C.F.R. Pts. 141-419), airports (14 C.F.R. Pts. 151-167), and navigation facilities (14 C.F.R. Pt. 171). Specific include regulations governing designation of federal airways (14 C.F.R. Pt. 71), establishment of jet routes (14 C.F.R. Pt. 75), objects affecting navigable airspace (14 C.F.R. Pt. 77), general operating and flight rules (14 C.F.R. Pt. 91) (which include minimum safe altitudes [14 C.F.R. §§ 91.79, 91.119] and operates at airports [14 C.F.R. §§ 91.87-91.89]), special air traffic rules and airport traffic patterns (for certain specified airports) (14 C.F.R. Pt. 93), instrument flight rule altitudes (14 C.F.R. Pt. 95), and standard instrument approach procedures (14 C.F.R. Pt. 97).

In November, 1969, the FAA added Part 36, Noise Standards: Aircraft Type Certification, to the Federal Aviation Regulations. 34 Fed. Reg. 18355-18379, Nov. 18, 1969; see 34 Fed. Reg. 19025, Nov. 29, 1969. These regulations are restricted in their application to prescribing noise standards for type certification of new subsonic aircrafts, but represent the initiation of the noise abatement regulatory program authorized by 14 U.S.C. § 1431. 34 Fed. Reg. 18355, Nov. 18, 1969.

The Federal Aviation Act of 1958 by its terms is not intended to be exclusive:

"Nothing contained in this chapter shall in any way abridge or alter the remedies now existing at common law or by statute, but the provisions of this chapter are in addition to such remedies."  
49 U.S.C. § 1506.

This provision appears to permit state as well as federal remedies in addition to the Federal Aviation Act.

The legislative history of the 1968 noise amendments to the Federal Aviation Act makes clear that Congress did not intend to occupy the field of noise regulation to the absolute exclusion of state and local regulation. As stated in the Senate Committee report:

"It is not the intent of the committee in recommending this legislation to effect any change in the existing apportionment of powers between the Federal and State and local governments." S. Rep. No. 1353, July 1, 1968, U.S. Code Cong. and Adm. News (1968), 2688, 2693.

There is no question but that states and localities may not in their legislative capacities pass legislation in direct conflict with Federal legislation. The two municipal attempts at such legislation have both been invalidated by the courts. *Allegheny Airlines v. Cedarhurst*, 132 F. Supp. 871 (E.D.N.Y. 1955), *aff'd* 238 F.2d 812 (2d Cir. 1956); *American Airlines, Inc. v. Hempstead*, 272 F. Supp. 226 (E.D.N.Y. 1967), *aff'd* 398 F.2d 369 (2d Cir. 1968), *cert. denied* 393 U.S. 1017 (1969).

Cedarhurst, a Long Island community near what was then called Idlewild Airport (now John F. Kennedy) attempted to prohibit by ordinance air flights over the village at less than 1,000 feet. In *Allegheny Airlines v. Cedarhurst*, *supra*, 132 F. Supp. 871 (E.D.N.Y. 1955), the Federal District Court invalidated the ordinance on grounds of preemption by provisions of federal law and regulations. The United States Court of Appeal for the Second Circuit affirmed

this decision. *Allegheny Airlines v. Cedarhurst*, 238 F.2d 812 (2d Cir. 1956). In its opinion the court stated that the federal government had preempted the field of regulation of aircraft flight. *Id.* at 814.

Hempstead, another Long Island town near John F. Kennedy International Airport, adopted an ordinance imposing noise limitations on aircraft overflights. This too was invalidated. *American Airlines, Inc. v. Hempstead*, 272 F. Supp. 226 (E.D.N.Y. 1967). The court found that the effect of the ordinance was to deny the carriers approach, takeoff, and flight rights at levels granted them by the Federal Aviation Act of 1958 and the regulations adopted thereunder. There was a direct conflict between Federal and municipal action. The Court of Appeal for the Second Circuit affirmed. *American Airlines, Inc. v. Hempstead*, 398 F.2d 369 (2d Cir. 1968); cert. denied, 393 U.S. 1017 (1969).

In both *Cedarhurst, supra*, and *Hempstead, supra*, there was in fact direct conflict between the federal regulations and the municipal ordinances. *Allegheny Airlines v. Cedarhurst*, 238 F.2d 812, 814; *American Airlines, Inc. v. Hempstead*, 398 F.2d 369, 372-375. There are no reported holdings pertaining to the constitutionality of local regulations of aircraft noise which do not conflict with federal regulations.

The senate committee report that is part of the legislative history of the 1968 noise amendment states that insofar as regulation "involves controlling the flight of aircraft" the field is already preempted by the Federal Government. Senate Report No. 1353, *supra*, at 2693-2694. The California Supreme Court has disagreed with that assumption. In *Loma Portal Civic Club v. American Airlines, Inc.*, 61 Cal. 2d 582, 591, the court stated that it was not persuaded of the soundness

of the contention that state action affecting any aspect of flight operations is precluded by the extensive pattern of federal regulations in this field. The court noted that states may tax aircraft in interstate commerce and that state courts may entertain wrongful death actions against airlines, *Id.* at 593. The court further noted that the United States Supreme Court upheld a city's application of its antismoke ordinance to a ship in international commerce although the vessel's boiler was built in compliance with federal requirements and had received federal approval after inspection, *Ibid.* The California court quoted the United States Supreme Court to the effect that absent a clear holding by the latter court that federal jurisdiction has been made exclusive, state courts will not abdicate their jurisdiction. *Id.* at 591; see Wright, *The Law of Airspace*, 201-202; *Gardner v. County of Allegheny*, 114 A.2d 491, 497-498 (S.C. Pa. 1955); *Southeastern Aviation, Inc. v. Hurd*, 355 S.W.2d 436, 439-440 (S.C. Tenn. 1962), *appeal dismissed*, 371 U.S. 21.

The question whether states or localities may pass legislation affecting aircraft flight which conflicts with federal laws and regulations has been answered negatively. The question whether states or localities may pass legislation affecting aircraft flight which does not conflict with federal laws and regulations has not been answered definitively. The United States Court of Appeals for the Second Circuit in *Cedarhurst, supra*, and the California Supreme Court in *Loma Portal, supra*, have made conflicting statements in dicta. See *American Airlines, Inc. v. Town of Hempstead*, 398 F.2d 369, 376 n.4. While we find the reasoning of the California Supreme Court in *Loma Portal, supra*, persuasive, the question must ultimately be answered by the United States Supreme Court.

There exists one generally recognized exception to federal preemption—the power of the airport proprietor. Without violation of either the commerce or the supremacy clause, the owner of an airport has the right as landowner to decide who is to use his airport and under what conditions. *See Griggs v. Allegheny County*, 369 U.S. 84 (1962) (holding county as airport proprietor liable for damages caused by overflights).

The legislative history of the 1968 noise amendments to the Federal Aviation Act and the FAA have acknowledged the existence of this exception to federal powers. In the words of the Senate report:

"However, the proposed legislation will not affect the rights of a State or local public agency, as the proprietor of an airport, from issuing regulations or establishing requirements as to the permissible level of noise which can be created by aircraft using the airport. Airport owners acting as proprietors can presently deny the use of their airports to aircraft on the basis of noise considerations so long as such exclusion is non-discriminatory. . . . In dealing with this issue, the Federal Government should not substitute its judgment for that of the States or elements of local government who, for the most part, own and operate our Nation's airports. The proposed legislation is not designed to do this and will not prevent airport proprietors from excluding any aircraft on the basis of noise considerations." (Senate Report No. 1353, *supra*, 2694.)

The FAA has consistently acknowledged the powers and responsibilities of airport proprietors in the field of noise. The FAA's Notice of Proposed Rule Making

issued with the first proposed rules under the 1968 noise amendment states the following:

"[T]his notice does not promise a federal substitute for the actions that airport operators, as proprietors, can take and have traditionally and responsibly taken to make their airports fit the particular needs of their locales, such as establishing the conditions under which their airports and airport facilities may be used, including the issuance of specific noise ceilings." (34 Federal Register 457, Jan. 11, 1969.)

In adopting the aircraft type certification noise standards the FAA notice stated:

*"Relation to responsibility of airport proprietors.* Compliance with Part 36 is not to be construed as a Federal determination that the aircraft is 'acceptable,' from a noise standpoint, in particular airport environments. Responsibility for determining the permissible noise levels for aircraft using an airport remains with the proprietor of that airport. The noise limits specified in Part 36 are the technologically practicable and economically reasonable limits of aircraft noise reduction technology at the time of type certification and are not intended to substitute federally determined noise levels for those more restrictive limits determined to be necessary by individual airport proprietors in response to the locally determined desire for quiet and the locally determined need for the benefits or air commerce. This limitation on the scope of Part 36 is required for consistency with the responsibilities placed upon the airport proprietor by the U.S. Supreme Court in

*Griggs v. Allegheny County*, 369 U.S. 84 (1962). Consistent with this limited scope, this amendment specifies that the Federal Aviation Administration makes no determination, under Part 36, on the acceptability of the prescribed noise levels in any specific airport environment (see §§ 36.5 and 36.1581(a)). . . . [T]he FAA, in response to the *Griggs* decision (see above), recognizes the right of State or local public agencies, as the proprietors of airports, to issue nondiscriminatory restrictions with respect to the permissible level of noise that can be created by aircraft using their airports. However, the FAA does not recognize any right of any State or local government agency that is not an airport proprietor to issue any regulation controlling the flight of aircraft for noise purposes." 34 Federal Register 18355-18356, Nov. 18, 1969.

Most commercial airports in the United States, including most of those in California, are publicly owned. (*Id.* at 18356.) One major airport proprietor has adopted noise regulations in terms of perceived noise levels, the Port of New York Authority (which has proprietary authority over Kennedy, La Guardia, Newark and Teterboro Airports). Airport Rules and Regulations Rules 32010-06; Port of New York Authority, Terms and Conditions for the Operation of Jet Aircraft. Its regulations restricting runway use (despite FAA permission to use those runways) have been upheld against an airline's attack. *Port of New York Authority v. Eastern Airlines, Inc.*, 259 F. Supp. 745 (E.D.N.Y. 1966).

There is therefore no bar to governmental entities which own or lease airports imposing noise restrictions

in their proprietary rather than legislative capacity. (Regarding FAA approved methods, see Hoover and Cochran, FAA, *Airport Design and Operation for Minimum Noise Exposure* (1969), 12-13; Sperry, Powers, and Oleson, FAA, *The Federal Aviation Administration Aircraft Noise Abatement Program* (1968), 21-23.)

In 1969 the State of California enacted legislation directed at airport owners in their proprietary capacity which will establish noise limits by state regulation for each airport in the state. These regulations must be adopted by April, 1970, and will be effective, unless repealed by the Legislature, in January, 1971. Public Util. Code § 21669, *et seq.*; Stats. 1969, ch. 1585, p. 3222. The effect will be to establish noise limits around California's airports without conflict with the Commerce Clause.

Community noise may also be regulated through land use controls by creating a buffer area between the runway and the community. This may be done by airport siting, by condemning more land for the airport (so as to create an airport owned buffer), or by zoning (so as to limit usage of buffer land to uses compatible with aircraft noise).

None of these methods of reducing aircraft produced community noise raises any question of federal preemption. See: 34 Fed. Reg. 457, January 11, 1969. Federal policy is to encourage local zoning. See 49 U.S.C. §§ 1108(b), 1110(3), and 1110(4). The Federal Housing Act of 1954 makes funds available through the Housing and Home Finance Agency for community planning including airports. 40 U.S.C. § 461. The Federal Airport Act of 1946 provides for

federal grants in aid for planning within airport boundaries. 49 U.S.C. § 1101 *et seq.*

Community noise control through airport siting is not a matter of specific regulation by any governmental entity. Federal site approval is contingent primarily upon questions of safety. See 49 U.S.C. §§ 1108, 1110, 1349, 1350. The approval of California's Department of Aeronautics of a site application is made mandatory upon compliance with safety criteria and the Department's rules and regulations. Pub. Util. Code § 21666; see 32 Ops. Cal. Atty. Gen. 235. Those rules and regulations do not refer to community noise, but do require compliance with local zoning regulations. Title 4, Calif. Admin. Code § 3535 *et seq.*; Calif. Admin. Register 69, No. 39, § 3525 *et seq.* Siting precluding community noise could legally be required of the Department of Aeronautics by statute. See Pub. Util. Code § 21666. Regulations to that effect could be adopted by that Department without further legislation. See Pub. Util. Code §§ 21243, 21244, 21666. A locality by its zoning could also exclude an airport. Calif. Admin. Register 69, No. 39, §§ 3531(a)(1), 3558; see Govt. Code § 26027.

Community noise may be regulated by the airport proprietor's acquiring more land. A larger airport increases the distance between the noise source and the community. This mechanism does not raise jurisdictional questions.

A county or city may make and enforce within its limits all such local, police, sanitary or other regulations as are not in conflict with general laws. Cal. Const. Art. XI, § 11. This section permits the adoption of zoning regulations not in conflict with state law.

*Johnston v. Bd. of Sup. of Marin County*, 31 Cal. 2d 66. The state has legislated in the field of airport zoning, permitting a city or county to regulate the structures of buildings near airports. Govt. Code § 50485 *et seq.*; see *Morse v. San Luis Obispo County*, 247 Cal. App. 2d 600, rehear. den., hear. den.; *Sneed v. County of Riverside*, 218 Cal. App. 2d 205; Comment, *Airport Approach Zoning*, 12 U.C.L.A. Law Rev. 1451. The Airport Approaches Zoning Law by its own terms is not intended to preempt local regulation. Govt. Code § 50485.14. A city, county, or airport district may acquire an air easement above the surface of property by eminent domain. Code of Civ. Proc. §§ 1239.2-1239.4. The State Department of Aeronautics has statewide jurisdiction to approve or disapprove the erection of any structure within the state over 500 feet high. Pub. Util. Code §§ 21656-21657. Unless permitted by the department, structures constituting hazards to air navigation within one mile of airports are barred. Pub. Util. Code § 21659. The Department of Aeronautics also makes financial grants to public agencies owning and operating airports contingent upon appropriate airspace control and height restrictions. Pub. Util. Code § 21688.

The state may legislate further in the field of zoning around airports, and localities may act to the extent the state has not acted, and, if the state has acted, to the extent the state reserved to localities the power to take further action.

The answer to the request for analysis by the Environmental Quality Study Council has necessarily been general since the request was general. More concrete answers must await specific fact situations.